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THE ELEMENTARY SCHOOL TEACHER

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DEMOCRACY IN EDUCATION.

MODERN life means democracy, democracy means freeing intelligence for independent effectiveness — the emancipation of mind as an individual organ to do its own work. We naturally associate democracy, to be sure, with freedom of action, but freedom of action without freed capacity of thought behind it is only chaos. If external authority in action is given up, it must be because internal authority of truth, discovered and known to reason, is substituted.

How does the school stand with reference to this matter? Does the school as an accredited representative exhibit this trait of democracy as a spiritual force? Does it lead and direct the movement? Does it lag behind and work at cross-purpose? I find the fundamental need of the school today dependent upon its limited recognition of the principle of freedom of intelligence. This limitation appears to me to affect both of the elements of school life: teacher and pupil. As to both, the school has lagged behind the general contemporary social movement; and much that is unsatisfactory, much of conflict and of defect, comes from the discrepancy between the relatively undemocratic organization of the school, as it affects the mind of both teacher and pupil, and the growth and extension of the democratic principle in life beyond school doors.

The effort of the last two-thirds of a century has been successful in building up the machinery of a democracy of mind. It has provided the ways and means for housing and equipping

intelligence. What remains is that the thought-activity of the individual, whether teacher or student, be permitted and encouraged to take working possession of this machinery: to substitute its rightful lordship for an inherited servility. In truth, our public-school system is but two-thirds of a century old. It dates, so far as such matters can be dated at all, from 1837, the year that Horace Mann became secretary of the state board of Massachusetts; and from 1843, when Henry Barnard began a similar work in Connecticut. At this time began that growing and finally successful warfare against all the influences, social and sectarian, which would prevent or mitigate the sway of public influence over private ecclesiastical and class interests. Between 1837 and 1850 grew up all the most characteristic features of the American public-school system: from this time date state normal schools, city training schools, county and state institutes, teachers' associations, teachers' journals, the institution of city superintendencies, supervisory officers, and the development of state universities as the crown of the public-school system of the commonwealth. From this time date the striving for better schoolhouses and grounds, improved text-books, adequate material equipment in maps, globes, scientific apparatus, etc. As an outcome of the forces thus set in motion, democracy has in principle, subject to relative local restrictions, developed an organized machinery of public education. But when we turn to the aim and method which this magnificent institution serves, we find that our democracy is not yet conscious of the ethical principle upon which it rests — the responsibility and freedom of mind in discovery and proof — and consequently we find confusion where there should be order, darkness where there should be light. The teacher has not the power of initiation and constructive endeavor which is necessary to the fulfilment of the function of teaching. The learner finds conditions antagonistic (or at least lacking) to the development of individual mental power and to adequate responsibility for its use.

1. *As to the teacher.*— If there is a single public-school system in the United States where there is official and constitutional provision made for submitting questions of methods of discipline

and teaching, and the questions of the curriculum, text-books, etc., to the discussion and decision of those actually engaged in the work of teaching, that fact has escaped my notice. Indeed, the opposite situation is so common that it seems, as a rule, to be absolutely taken for granted as the normal and final condition of affairs. The number of persons to whom any other course has occurred as desirable, or even possible — to say nothing of necessary — is apparently very limited. But until the public-school system is organized in such a way that every teacher has some regular and representative way in which he or she can register judgment upon matters of educational importance, with the assurance that this judgment will somehow affect the school system, the assertion that the present system is not, from the internal standpoint, democratic seems to be justified. Either we come here upon some fixed and inherent limitation of the democratic principle, or else we find in this fact an obvious discrepancy between the conduct of the school and the conduct of social life — a discrepancy so great as to demand immediate and persistent effort at reform.

The more enlightened portions of the public have, indeed, become aware of one aspect of this discrepancy. Many reformers are contending against the conditions which place the direction of school affairs, including the selection of text-books, etc., in the hands of a body of men who are outside the school system itself, who have not necessarily any expert knowledge of education and who are moved by non-educational motives. Unfortunately, those who have noted this undemocratic condition of affairs, and who have striven to change it, have, as a rule, conceived of but one remedy, namely, the transfer of authority to the school superintendent. In their zeal to place the center of gravity inside the school system, in their zeal to decrease the prerogatives of a non-expert school board, and to lessen the opportunities for corruption and private pull which go with that, they have tried to remedy one of the evils of democracy by adopting the principle of autocracy. For no matter how wise, expert, or benevolent the head of the school system, the one-man principle is autocracy.

The logic of the argument goes farther, very much farther,

than the reformer of this type sees. The logic which commits him to the idea that the management of the school system must be in the hands of an expert commits him also to the idea that every member of the school system, from the first-grade teacher to the principal of the high school, must have some share in the exercise of educational power. The remedy is not to have one expert dictating educational methods and subject-matter to a body of passive, recipient teachers, but the adoption of intellectual initiative, discussion, and decision throughout the entire school corps. The remedy of the partial evils of democracy, the implication of the school system in municipal politics, is in appeal to a more thoroughgoing democracy.

The dictation, in theory at least, of the subject-matter to be taught, to the teacher who is to engage in the actual work of instruction, and frequently, under the name of close supervision, the attempt to determine the methods which are to be used in teaching, mean nothing more or less than the deliberate restriction of intelligence, the imprisoning of the spirit. Every well graded system of schools in this country rejoices in a course of study. It is no uncommon thing to find methods of teaching such subjects as reading, writing, spelling, and arithmetic officially laid down; outline topics in history and geography are provided ready-made for the teacher; gems of literature are fitted to the successive ages of boys and girls. Even the domain of art, songs and methods of singing, subject-matter and technique of drawing and painting, come within the region on which an outside authority lays its sacrilegious hands.

I have stated the theory, which is also true of the practice to a certain extent and in certain places. We may thank our heavens, however, that the practice is rarely as bad as the theory would require. Superintendents and principals often encourage individuality and thoughtfulness in the invention and adoption of methods of teaching; and they wink at departures from the printed manual of study. It remains true, however, that this great advance is personal and informal. It depends upon the wisdom and tact of the individual supervisory official; he may withdraw his concession at any moment; or it may be ruth-

lessly thrown aside by his successor who has formed a high ideal of "system."

I know it will be said that this state of things, while an evil, is a necessary one; that without it confusion and chaos would reign; that such regulations are the inevitable accompaniments of any graded system. It is said that the average teacher is incompetent to take any part in laying out the course of study or in initiating methods of instruction or discipline. Is not this the type of argument which has been used from time immemorial, and in every department of life, against the advance of democracy? What does democracy mean save that the individual is to have a share in determining the conditions and the aims of his own work; and that, upon the whole, through the free and mutual harmonizing of different individuals, the work of the world is better done than when planned, arranged, and directed by a few, no matter how wise or of how good intent that few? How can we justify our belief in the democratic principle elsewhere, and then go back entirely upon it when we come to education?

Moreover, the argument proves too much. The more it is asserted that the existing corps of teachers is unfit to have voice in the settlement of important educational matters, and their unfitness to exercise intellectual initiative and to assume the responsibility for constructive work is emphasized, the more their unfitness to attempt the much more difficult and delicate task of guiding souls appears. If this body is so unfit, how can it be trusted to carry out the recommendations or the dictations of the wisest body of experts? If teachers are incapable of the intellectual responsibility which goes with the determination of the methods they are to use in teaching, how can they employ methods when dictated by others, in other than a mechanical, capricious, and clumsy manner? The argument, I say, proves too much.

Moreover, if the teaching force is as inept and unintelligent and irresponsible as the argument assumes, surely the primary problem is that of their improvement. Only by sharing in some responsible task does there come a fitness to share in it. The

argument that we must wait until men and women are fully ready to assume intellectual and social responsibilities would have defeated every step in the democratic direction that has ever been taken. The prevalence of methods of authority and of external dictation and direction tends automatically to perpetuate the very conditions of inefficiency, lack of interest, inability to assume positions of self-determination, which constitute the reasons that are depended upon to justify the régime of authority.

The system which makes no great demands upon originality, upon invention, upon the continuous expression of individuality, works automatically to put and to keep the more incompetent teachers in the school. It puts them there because, by a natural law of spiritual gravitation, the best minds are drawn to the places where they can work most effectively. The best minds are not especially like to be drawn where there is danger that they may have to submit to conditions which no self-respecting intelligence likes to put up with; and where their time and energy are likely to be so occupied with details of external conformity that they have no opportunity for free and full play of their own vigor.

I have dwelt at length upon the problem of the recognition of the intellectual and spiritual individuality of the teacher. I have but one excuse. All other reforms are conditioned upon reform in the quality and character of those who engage in the teaching profession. The doctrine of the man behind the gun has become familiar enough, in recent discussion, in every sphere of life. Just because education is the most personal, the most intimate, of all human affairs, there, more than anywhere else, the sole ultimate reliance and final source of power are in the training, character, and intelligence of the individual. If any scheme could be devised which would draw to the calling of teaching persons of force of character, of sympathy with children, and consequent interest in the problems of teaching and of scholarship, no one need be troubled for a moment about other educational reforms, or the solution of other educational problems. But as long as a school organization which is undemocratic in principle tends to repel from all but the higher portions

of the school system those of independent force, of intellectual initiative, and of inventive ability, or tends to hamper them in their work after they find their way into the schoolroom, so long all other reforms are compromised at their source and postponed indefinitely for fruition.

2. *As to the learner.*— The undemocratic suppression of the individuality of the teacher goes naturally with the improper restriction of the intelligence of the mind of the child. The mind, to be sure, is that of a child, and yet, after all, it is mind. To subject mind to an outside and ready-made material is a denial of the ideal of democracy, which roots itself ultimately in the principle of moral, self-directing individuality. Misunderstanding regarding the nature of the freedom that is demanded for the child is so common that it may be necessary to emphasize the fact that it is primarily intellectual freedom, free play of mental attitude, and operation which are sought. If individuality were simply a matter of feelings, impulses, and outward acts independent of intelligence, it would be more than a dubious matter to urge a greater degree of freedom for the child in the school. In that case much, and almost exclusive, force would attach to the objections that the principle of individuality is realized in the more exaggerated parts of Rousseau's doctrines: sentimental idealization of the child's immaturity, irrational denial of superior worth in the knowledge and mature experience of the adult, deliberate denial of the worth of the ends and instruments embodied in social organization. Deification of childish whim, unripened fancy, and arbitrary emotion is certainly a piece of pure romanticism. The would-be reformers who emphasize out of due proportion and perspective these aspects of the principle of individualism betray their own cause. But the heart of the matter lies not there. Reform of education in the direction of greater play for the individuality of the child means the securing of conditions which will give outlet, and hence direction, to a growing intelligence. It is true that this freed power of mind with reference to its own further growth cannot be obtained without a certain leeway, a certain flexibility, in the expression of even immature feelings and fancies. But

it is equally true that it is not a riotous loosening of these traits which is needed, but just that kind and degree of freedom from repression which are found to be necessary to secure the full operation of intelligence.

Now, no one need doubt as to what mental activity or the freed expression of intelligence means. No one need doubt as to the conditions which are conducive to it. We do not have to fall back upon what some regard as the uncertain, distracting, and even distressing voice of psychology. Scientific methods, the methods pursued by the scientific inquirer, give us an exact and concrete exhibition of the path which intelligence takes when working most efficiently, under most favorable conditions.

What is primarily required for that direct inquiry which constitutes the essence of science is first-hand experience; an active and vital participation through the medium of all the bodily organs with the means and materials of building up first-hand experience. Contrast this first and most fundamental of all the demands for an effective use of mind with what we find in so many of our elementary and high schools. There first-hand experience is at a discount; in its stead are summaries and formulas of the results of other people. Only very recently has any positive provision been made within the schoolroom for any of the modes of activity and for any of the equipment and arrangement which permit and require the extension of original experiences on the part of the child. The school has literally been dressed out with hand-me-down garments — with intellectual suits which other people have worn.

Secondly, in that freed activity of mind which we term "science" there is always a certain problem which focusses effort, which controls the collecting of facts that bear upon the question, the use of observation to get further data, the employing of memory to supply relevant facts, the calling into play of imagination, to yield fertile suggestion and construct possible solutions of the difficulty.

Turning to the school, we find too largely no counterpart to this mental activity. Just because a second-handed material has been supplied wholesale and retail, but anyway ready-made, the

tendency is to reduce the activity of mind to a docile or passive taking in of the material presented — in short, to memorizing, with simply incidental use of judgment and of active research. As is frequently stated, acquiring takes the place of inquiring. It is hardly an exaggeration to say that the sort of mind-activity which is encouraged in the school is a survival from the days in which science had not made much headway; when education was mainly concerned with learning, that is to say, the preservation and handing down of the acquisitions of the past. It is true that more and more appeal is made every day in schools to judgment, reasoning, personal efficiency, and the calling up of personal, as distinct from merely book, experiences. But we have not yet got to the point of reversing the total method. The burden and the stress still fall upon learning in the sense of becoming possessed of the second-hand and ready-made material referred to. As Mrs. Young has recently said, the prevailing ideal is a perfect recitation, an exhibition without mistake, of a lesson learned. Until the emphasis changes to the conditions which make it necessary for the child to take an active share in the personal building up of his own problems and to participate in methods of solving them (even at the expense of experimentation and error), mind is not really freed.

In our schools we have freed individuality in many modes of outer expression without freeing intelligence, which is the vital spring and guarantee of all of these expressions. Consequently we give opportunity to the unconverted to point the finger of scorn, and to clamor for a return to the good old days when the teacher, the representative of social and moral authority, was securely seated in the high places of the school. But the remedy here, as in other phases of our social democracy, is not to turn back, but to go farther — to carry the evolution of the school to a point where it becomes a place for getting and testing experience, as real and adequate to the child upon his existing level as all the resources of laboratory and library afford to the scientific man upon his level. What is needed is not any radical revolution, but rather an organization of agencies already found in the schools. It is hardly too much to say that not a single

subject or instrumentality is required which is not already found in many schools of the country. All that is required is to gather these materials and forces together and unify their operation. Too often they are used for a multitude of diverse and often conflicting aims. If a single purpose is provided, that of freeing the processes of mental growth, these agencies will at once fall into their proper classes and reinforce each other.

A catalogue of the agencies already available would include at least all of the following: Taking the child out of doors, widening and organizing his experience with reference to the world in which he lives; nature study when pursued as a vital observation of forces working under their natural conditions, plants and animals growing in their own homes, instead of mere discussion of dead specimens. We have also school gardens, the introduction of elementary agriculture, and more especially of horticulture — a movement that is already making great headway in many of the western states. We have also means for the sake of studying physiographic conditions, such as may be found by rivers, ponds or lakes, beaches, quarries, gulleys, hills, etc.

As similar agencies within the school walls, we find a very great variety of instruments for constructive work, or, as it is frequently, but somewhat unfortunately termed, "manual training." Under this head come cooking, which can be begun in its simpler form in the kindergarten; sewing, and what is of even greater educational value, weaving, including designing and the construction of simple apparatus for carrying on various processes of spinning, etc. Then there are also the various forms of tool-work directed upon cardboard, wood, and iron; in addition there are clay-modeling and a variety of ways of manipulating plastic material to gain power and larger experience.

Such matters pass readily over into the simpler forms of scientific experimentation. Every schoolroom from the lowest primary grade up should be supplied with gas, water, certain chemical substances and reagents. To experiment in the sense of trying things or to see what will happen is the most natural business of the child; it is, indeed, his chief concern. It is one which the school has largely either ignored or actually suppressed,

so that it has been forced to find outlet in mischief or even in actually destructive ways. This tendency could find outlet in the construction of simple apparatus and the making of simple tests, leading constantly into more and more controlled experimentation, with greater insistense upon definiteness of intellectual result and control of logical process.

Add to these three typical modes of active experimenting, various forms of art expression, beginning with music, clay-modeling, and story-telling as foundation elements, and passing on to drawing, painting, designing in various mediums, we have a range of forces and materials which connect at every point with the child's natural needs and powers, and which supply the requisites for building up his experience upon all sides. As fast as these various agencies find their way into the schools, the center of gravity shifts, the régime changes from one of subjection of mind to an external and ready-made material, into the activity of mind directed upon the control of the subject-matter and thereby its own upbuilding.

Politically we have found that this country could not endure half free and half slave. We shall find equally great difficulty in encouraging freedom, independence, and initiative in every sphere of social life, while perpetuating in the school dependence upon external authority. The forces of social life are already encroaching upon the school institutions which we have inherited from the past, so that many of its main stays are crumbling. Unless the outcome is to be chaotic, we must take hold of the organic, positive principle involved in democracy, and put that in entire possession of the spirit and work of the school.

In education meet the three most powerful motives of human activity. Here are found sympathy and affection, the going out of the emotions to the most appealing and the most rewarding object of love — a little child. Here is found also the flowering of the social and institutional motive, interest in the welfare of society and in its progress and reform by the surest and shortest means. Here, too, is found the intellectual and scientific motive, the interest in knowledge, in scholarship, in truth for its own sake, unhampered and unmixed with any alien ideal. Copartner-

ship of these three motives — of affection, of social growth, and of scientific inquiry — must prove as nearly irresistible as anything human when they are once united. And, above all else, recognition of the spiritual basis of democracy, the efficacy and responsibility of freed intelligence, is necessary to secure this union.

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SOCIAL NEEDS OF CHILDREN.

WHAT is meant by a child's social needs? It is his need to learn to co-operate with others, in work and in play, in a manner best fitted for his and his associates' highest development. In these days of social unrest and failure to recognize one's obligation to his neighbor, we all agree that there can be no part of a child's education that is more important. These social needs should be recognized in the school and in the home, and, it would be logical and natural to add, in the church. But for the purposes of this paper the school and the home centers only will be considered. Social organization takes place naturally when there is something to do. In the words of one of the leading educators, "when occupations are made the articulating centers" of home life and of school life, the social nature of the child grows and expands. Some educators are telling us how this can be accomplished in schools. The school is not a place for the acquisition of knowledge only. It is where the social instinct is recognized, while all of the powers of the body, mind, and soul are unfolding and developing, under wise guidance. In order to fully accomplish this, the life of the school and home must supplement each other. Were the schools social centers, our parents and teachers would meet on common ground for the furtherance of a better social spirit among all sorts and conditions of children.

How this can be accomplished in the home is only now beginning to occupy the attention of educators and parents alike. Professor Henderson, in *Education and the Larger Life,* after finding that the public schools are in session for less than one-half of the year and for less than one-fourth of the day, urges the importance of instructing the home on the question of its larger social duties. He says:

> It may be that the social purpose is divided between the school and the home, giving seven-eighths of the total year to the home. If this large share belong properly to the home, it would seem that by far the more important part of education consists in instructing the home, and that a true normal

school ought to devote seven-eighths of its time to the enlightenment of fathers and mothers, and one-eighth to the narrower pedagogy of the school. But this is not done, and, as we all know, even in the schools themselves, the question of parenthood and its tremendous social duties is hardly touched upon at all. That is to say, we leave this immense slice of the educational process quite unprovided for. Now, this social failure of the home [and we might well add, of the school] is so manifest, and the recognition of it so widespread, that on all sides one sees the beginning of a movement to provide rational occupation for children, during at least, a part of their large holiday time. One hears of Saturday morning classes in woodwork, or sewing, or cooking, or gymnastics, outings in the country, summer camps for boys, and vacation schools.

The recognition of these social needs means the recognition of proper activities. In the olden time, when the household was the center about which all forms of industrial occupations clustered, there was plenty to occupy the time of the children of the family. Now that the industrial occupations have largely passed out of the home, there is great need to recognize the lack of proper home interests for children. Our great material prosperity has destroyed the simplicity of our lives. The complex organization of the present household overlooks the help that the boys and girls in the family might furnish. Such work, when the home and the school are properly correlated, can be made educative and developing. While, in a sense, the work is not as vital as in the old days when the household and neighborhood systems prevailed, still a household can be conducted upon scientific and ethical principles, so that the children can receive a valuable training and education, physically, intellectually, and morally. This, however, means that we must simplify our own and our children's lives. It means that the children must co-operate actively in the work and the life of the home, and that the parents must participate rather than direct. The strenuous demands of the outside world upon the members of the family often lose to it that tranquillity which must exist for the fructifying of its highest social life. Owing to the tendency of our civilization to specialize, many most vital things have passed out of the home. And these must be restored; otherwise the home is in danger.

Children need other interests; they need play, social inter-

course with their mates. This interest should be understood and directed by the combined judgment of the teacher and parent. In some neighborhoods this is well met by the schools, with their public playgrounds, under the supervision of specialists. In other neighborhoods this want is supplied by the home. The children gather in a vacant lot or back yard, and we see games of tennis, football, baseball, basket-ball, cave-building, athletic sports, skating, and tobogganing. In the winter, appropriate social gatherings, which preserve the spirit of simplicity and naturalness, occur at the homes. But when this life has been most harmonious and most conducive to a proper social spirit, I have observed that some guiding hand has been at the helm, some mother with better insight into her children's wants has directed the social life, although so skilfully that the children have not even suspected it.

But there should be a true balance of these interests; neither play nor work should predominate. The interests about the home and the school should be properly proportioned. Social life is hampered by the lack of correlation between the different centers about which interests should cluster. It is complicated by the dissipation in many directions of these interests, which should concentrate about definite centers.

Educators and parents should come together and study these questions. An effort was made in this direction in connection with the Parents' Association of the Laboratory School of the University of Chicago. About ten years ago, when the school was first established, some of the parents met for the purpose of considering the best way of maintaining the school and to come to a better understanding of its principles. An association, which became an important factor in the history of the school, grew out of these meetings. While Dr. Dewey co-operated in every way and was indirectly its inspiration, he left it to grow entirely through its own efforts.

At first the work was done through the general meetings. These were attended by the mothers. Later these meetings were held in the evening, so that the fathers might join. The teachers explained their work, and different professors at the University discussed educational questions. The parents were encouraged

to take part in the discussions. Some of these meetings were entirely social in their character. As the community feeling about the school grew, it became plain that the usefulness of the association could be increased by committee work.

There was a desire on the part of many parents to study more thoroughly educational questions and the work of leading educators. So the educational committee arranged for courses of lectures. Dr. Dewey, Mrs. Young, and Professor Tufts gave these at the University for the benefit of all who were interested in the school. This committee co-operated with the teachers in securing the best expression of Dr. Dewey's thought in the actual conduct of the school.

The social committee met and discussed the social needs of the boys and girls, at the same time striving to bring all of the mothers together socially. Among other things, we agreed that no sex line should be recognized; that the girls should be simply dressed; that there should be no idle roaming about the streets or idle visiting; that the social gatherings, which we entirely approved of should be most simple. For the younger children we encouraged sleigh rides, picnics, or afternoon parties. For the older ones we stood for early hours and plain dressing. And always we discouraged too frequent festivities of this sort. We arranged with a young University man who had the true spirit of play to encourage plenty of activity of the right sort, among the boys, during noon time and for a time after school. We arranged with the young woman director of the gymnasium to initiate the girls into games out of school. The teachers met with us Then each member of the committee acted as chairman of a subcommittee and called that committee together, spreading the principles for which the main committee stood. These committees met informally at the homes of the members. In this way the parents became acquainted. We came to know the needs of our friends' children, and they of ours, and I think we were of mutual assistance. In this way the school was brought into the closest touch with all the families represented in it, and furnished a unique instance of the whole neighborhood being a part of it, so that this community was associated with the methods, aims,

and ambitions of the school in a way that made it an uplifting force, not only to its pupils, but to a large constituency. This committee hoped to arrange for discussions upon such subjects as "Proper Recreation for Children," "Social Needs During Adolescence," "Need of Public Playgrounds," "Value of Neighborhood Director of Games," "Athletics," "Fraternities," "Out-of-Door Life in Cities."

The purpose of the house committee was not so definitely recognized. It began to be clear, however, that this committee might be of great value. It could co-operate with the school in correlating the work of the home and of the school. During the school period, and especially in the case of the older boys and girls, the school encroaches very much upon the home. During the long vacation time it is difficult for the home to arrange properly for the children. The manual training, cooking, and sewing taught in the school are more often never practiced in the home. The organization of the household and the demands of the school upon the strength and time of the children prevent this. Appropriate subjects for lectures and discussion would be: "Scientific Organization of the Household," "How Can Home Life and School Life Be Correlated?" "Children's Home Duties," "Domestic Science."

We were strenuous in our efforts to infuse into the little community which grew about this school simplicity in thought and in action, and I think we were rewarded by seeing our boys and girls reach the ages of sixteen and seventeen natural and wholesome. But we did not have our own children only in mind. We hoped that the learning of a university, that rare pedagogical insight, combined with the earnest watchfulness and experience of the teachers and parents, might throw light upon what the social life of children of all communities, and especially of less favored communities, should be. We hoped that all children might be helped to the rich inheritance of what should be theirs, by the perfect growth of all their powers.

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NOTES ON SCHOOL MANAGEMENT.

"SCHOOL MANAGEMENT" is in the minds of those most concerned a somewhat uncertain term. The course often given in normal schools and colleges under that name varies greatly in content. It is next to the course in "methods" in degree of variability. In many cases it is very specific, and when there is an attempt at general statement the result is none too successful. In our texts on the subject there is a range from books of rules to idealistic visions of harmonies. One of our great committees wrestled with the subject, somewhat as an aside, but from every standpoint there is an opportunity for good work still to be done in this field.

One of the difficulties has been that we are not clear as yet as to the foundations of the internal government of schools. Are they to be democratic or monarchical in organization? The principles worked out in general government, and having reference there to immediate participation by adult males only, rightly or wrongly, are considered by many inapplicable to an institution so largely, as far as daily routine is concerned, now in the hands of young women. Then, too, the massing of numbers of pupils makes the government forms of the home out of place in the school, and raises the question as to the extent to which these children and young people can function in the organization which exists to aid them in their growth.

The reports written by some of the city superintendents, and such works as Mrs. Young's *Isolation in the School,* are the most promising material that we have. Our need is more discussions which take a large view of the school as a growing organism working out its own statement of function. We have much petty self-consciousness so far, but little of the large consciousness which makes for progress in an economical manner.

The self-government movement, while often a fad, indicates an appreciation of collective interests which will contribute much of permanent value. The recognition which we find of

"school housekeeping," as a part of the published school curriculum even for older students, will also help. The best teachers have always recognized the need of placing responsibility where it rightly belongs, but we are coming now to a larger recognition of what this means.

The higher training of teachers will before long make a number of strides forward. At present it is still hard to learn how to use school tools without at the same time becoming mechanical. The training systems make it hard to foster individual excellence. The result is two classes of teachers, a large number of one class forgetting the weightier matters in their devotion to the really valuable things that they have learned, while the greater number of the other class are hampered in realizing the vision they follow because no man has helped them to overcome the little difficulties which will not be ignored. Smaller training centers, in closer relation to actual conditions, with more efficient supervision there and later, promise to help us.

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PROGRESS IN THE SCHOOLS OF A LARGE CITY.

An era of improvement in the school system of St. Louis began with a new school law. In accordance with this, members of the board of education, instead of being chosen to represent each his own ward, are elected on a ticket at large. The board is composed of twelve members, chosen for a term of six years, two retiring each year. It is nonpartisan, and the school administration is absolutely free from entanglements with city politics; the only point of contact between school and municipal governmental machinery being in the tax collector's office, where the school tax, as a fund separate from the city tax, is collected by the city's official.

The elections under this law have brought together a representative body of men, earnest and progressive. The policy of the board throughout has been a wisely liberal one. It began by sending superintendents and supervisors to visit cities in the North and East whose schools were reputed to have made the greatest progress. Five years ago, when the text-books in all the grades were changed for very much better ones, free books were given to all pupils in the first four grades. Since September of this year free kindergarten material, free books, and writing, drawing, and painting material have been provided throughout the grammar and high schools. The salaries of teachers had been painfully small. Four years ago all third assistants were advanced to the rank of second assistants, with a maximum salary of six hundred dollars. Within the last two years all salaries throughout the grammar schools have been raised twice, making a total increase for the former third assistant of a little more than 23 per cent. By enlisting the interest of enlightened citizens in the election last year, the board succeeded in raising the school tax from four mills on the dollar to six. Manual-training and domestic-science plants have been established in various schools as centers where all pupils of the seventh and eighth grades now have weekly lessons in some of the practical arts.

The problem of housing the increasing numbers of pupils has been no small one. Within a few years there has been erected a number of handsome buildings, seemingly as perfectly adapted to their purpose as one could well imagine. By gifts from the Ladies' Art League, and also from an art-loving merchant, reproductions of the best works of art have been placed in nearly all the schools of the city, so that rooms even in the oldest buildings now wear an aspect wholly unknown to the public-school child of ten years ago.

The number of pupils assigned to one teacher is no longer so great as formerly, and we hope the day may not be far distant when it will be still further reduced to a number that will permit more attention to the individual child.

Perhaps the most characteristic feature of our system of school administration is the definiteness with which responsibility is placed. The superintendent is clearly responsible for the work of the whole system. He nominates candidates for positions, and the board confirms their appointment. No candidate can be appointed if the superintendent and his assistants recognize her as unfitted for the place. Similarly each principal is responsible for the work in his building. If the teachers sent him are unsatisfactory, he must so report.

In how democratic a spirit the government of this seemingly autocratic form of organization is administered may be seen in the method by which the course of study was changed two years ago. When the change was first contemplated, every principal and teacher was invited to send to the superintendent's office, on blanks provided for the purpose and without the writer's signature, any criticism on any subject he or she might see fit to make. When these criticisms had been classified and tabulated, committees were called for each school subject. These were composed of about sixteen members chosen from different schools and represented the eight grammar school grades. After presentation of the criticisms received by the superintendent the members were invited to discuss these freely and to suggest changes.

Vital relations between the parts of the system are maintained

by monthly meetings of the supervisory force, by meetings of the superintendent and principals, and by weekly meetings of principals with their teachers.

We come now to progress made in the schoolroom. Here, where the forward step depends, not simply on the expenditure of money, as in the erection of a building or in the free distribution of books, but upon a change in the mental habits of several hundred teachers in the same grade, progress, if it is to be made at all, can be made but slowly. In this the superintendent has shown his wisdom, first in waiting, as a rule, to encourage some principal interested in a certain line of work to take the initiative and test its advisability in his school, and, secondly, in extending this work, not by forcing upon other principals or teachers a practice that had thus approved itself, but, rather, by inviting them to visit the experimental station and to adopt what to them might seem good. Comparison of methods by visits to other schools has very frequently been the means of bringing the most conservative principal to break with some long and dearly cherished practice. This slow method of procedure has saved our school system from the disturbing effect of fads. While, in raising the standard of teaching, the superintendent has been obliged to eliminate from the corps its least efficient members, progress has, on the whole, been made without friction between supervisors and principals, or principals and teachers. We have advanced by healthy growth.

The habit of open-mindedness has also been strengthened by the fortnightly meetings of the Pedagogical Society on Saturdays. This is a voluntary association composed of more than a thousand members. While wholly independent of the school administration, the society has always maintained most cordial relations with the superintendent, who is repeatedly invited to address its members. The president is generally a principal of one of the grammar schools; work in the sections is done with principals, high-school teachers, and occasionally a supervisor or professor of Washington University as leaders. In the section on methods both conservative and radical principals have had an opportunity, either directly or through their teachers, to demonstrate their

work with classes. The value of these meetings is seen in the animated discussion to which they have given rise whenever teachers happen to meet in small groups. No one now feels that any pedagogical practice is of necessity fixed for all eternity.

The Pedagogical Society is still further instrumental in keeping up a wholesome circulation of ideas by bringing as lecturers before the teachers of our city men and women who have become eminent in the work of education.

In reporting on the progress made in instruction, two facts of fundamental importance are to be noted: first, that principals are coming more and more to be educational leaders, instead of being, as formerly, merely the chief executive officers in their buildings, whose principal duty it was to make out reports and pass upon the fitness of classes for promotion. Of equal importance with this is the fact that teachers are coming more and more to be real teachers, instead of being mere hearers of recitations.

The first step away from dull routine in the three R's was made by the late principal of the Columbia School, Mr. Howard. Both by the loan of books from the public library and by purchase of sets of books with money contributed by principal and teachers, the value of supplementary reading was proved beyond dispute. The enthusiasm of our librarian, Mr. Crunden, and of his assistant in the juvenile department, Miss Krug, in supplying sets of books for class work, made it easy for many other principals to convince themselves of the value of the work. Within the last five years the board of education has purchased annually five thousand five hundred dollars worth of books, in sets of thirty, that remain as a permanent library in each school. It was thought that the books purchased by the board would lessen the demand for books from the public library. The result has been contrary to our expectation. Teachers who years ago would have thought there was no time for any supplementary reading, if they would do the work prescribed in the course of study successfully, now find that they want more reading matter than this liberality supplies. Children, too, having acquired a taste for reading now want books to take home. The library, therefore, carries on two kinds of work in the schools: it sends, on demand from the

teacher and through the supply department of the schools, enough copies of a single book for class work, and also, if desired, a miscellaneous collection of books to be distributed for home reading.

Naturally, with the increased fund of ideas acquired through the reading of more interesting books, there comes a greater freedom in oral and written expression. Children at the end of the second grade are able now to reproduce stories and to tell their own experiences in a manner that five years ago would have been impossible to pupils in the fourth grade.

Arithmetic in the primary grades has been improved also through the stimulus of individual principals. Excessive and deadening drill in the lower grades "on the facts" has been superseded by much intelligent work with objects. The most helpful single device has been the square-inch tablet of very firm, heavy cardboard. By the use of liquid and linear measures, the comparison of areas by means of rectangles, and other figures cut from paper in sets, one for each child, and by the use of rulers in the construction of figures, the teacher has laid the basis for a much greater variety of work than was formerly possible. The board of education supplies to every first- and second-grade room sets of thirty boxes containing each thirty-six square-inch tablets, also thirty foot-rules, and an ample supply of three- by four-inch blank cards upon which the teacher writes as many problems as she wishes for the use of each individual child. Drill in arithmetic is not dispensed with, but is, I think, becoming rationalized.

In the introduction of water-color work and for advance in drawing the initiative came from the superintendent direct. Meetings were called at intervals of two weeks where the teachers of a given grade received instruction from the supervisors of drawing. Each teacher received ten lessons on the new work. The teachers, by dismissing their children when they could not otherwise be provided for, were expected to assemble half an hour before the usual time of dismissal in the afternoon and to remain an hour and a half.

Occasionally meetings are held for the teachers of the primary grades to discuss certain features of their work. To make these meetings small enough to be informal, only one-third of the

teachers of a single grade are called at one time. The methods of the primary teacher make it easier for her now than in the past to appreciate the significance of the kindergarten for the child and for her own work with him in the schoolroom. Indeed, we may say that the spirit of the kindergarten has gradually entered the primary room, so that there is no longer the abrupt transition that formerly every earnest kindergarten and primary teacher had to deplore.

A gradual dawning of the dynamic view of life in nature and in society has given a new interest to the teaching of geography. It is in this branch, perhaps more than in any other, that the teacher realizes that she must teach before she can hear a recitation. In spite of the difficulty in conducting excursions in the city with large numbers of children, there are some teachers who take their pupils on very profitable trips.

The problem of nature study in the public schools is most difficult. The life of humanity surges about the city child, while the life of nature is far removed. The introduction of budding twigs and winged seeds into the schoolroom, apart from their natural surroundings, is, at best, but a poor substitute for life in and with nature. The best results so far have been obtained by the efforts of some principals in encouraging school gardens, where these were possible, and of the Engelmann Botanical Club in distributing seeds at a nominal price to children throughout the city for home planting.

A chorus of four thousand public-school children took part in one of the concerts of the national *Sängerfest* held in St. Louis last summer. Their singing, that moved some of the world-famous soloists to tears, testified in no uncertain way to the excellence of their training in music.

The significance of the progress made in all directions throughout the schools lies in this, that it has come because here in St. Louis, as everywhere else, man is more clearly conscious than ever before that, in dealing with children, we are dealing with that which, even in the lowliest, is of infinite worth — that we are dealing with spirit.

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ST. LOUIS CITY SCHOOLS.

THE PROBLEM OF SCHOOL MANAGEMENT.

EVERY person having charge of a school is confronted with this problem: "How can I best conserve the school forces and bring them into harmonious relations so that the children's interest may be properly protected and the best possible conditions for growth be procured?" There are four factors which enter into the consideration of this problem: the pupil, the teacher, the parent, and the supervisor. Each has rights which all of the other forces must respect. A lack of harmony between any two of these produces a disturbed condition, which has a detrimental influence throughout the whole system. The supervisor must take the initiative in the socialization of these forces; upon him devolves the solution. The school progresses in proportion to his powers of socialization; he must be a social being by birth, education, or adoption.

A teacher once gave to a history class composed of small boys this meaningless expression: "The principal cause of the Civil War was non-intercourse between the North and South." In time the boys lived the meaning into these words; they saw that all troubles have their source in the misunderstanding of conditions and circumstances. In school life the expression applies to all forms of dissension and strife, and the problems of school management today would almost entirely disappear were it not for the non-intercourse among the four factors above cited.

Allow me to present my thought in a word-picture. In a large majority of the schools of today children enter the first day in September, fifty of them in a room presided over by a comparative stranger. This stranger has been told through her training, or has learned by experience, that for disciplinary purposes the children must be kept busy. The first day she usually places a large number of arithmetic problems on the blackboard. She knows that this device will mechanically hold the attention of the class until she can get her bearings. There is no attempt at mutual acquaintanceship. The teacher is not permitted to sit down with her pupils and talk with them in a social way, as

she would were she just introduced into a group of fifty young people; the children would become too noisy. She would not be allowed to go out with her children under a neighboring tree or upon the playground and talk with the young people, thus establishing a mutual friendship before the presentation of tasks. She must gain her acquaintance through the children at work and force labor upon her charge during the whole day, until the gong sounds the time for dismissal, when all must leave the building at once. Tired and exhausted, the teacher takes her keys to the office, hangs them on the keyboard, passes out without receiving or giving even a "good night," and goes home to think of the tasks she must put before the pupils the following day. She gets her keys the next morning without passing the compliments of the day with anyone, walks into her room with an air of forced sternness, thinking that her appearance may awe the pupils into submission, and starts the day's work with a determination to conquer or die. Thus is established her daily routine of labor.

The supervisor thinks he must sustain the dignity of his position, and so does not take the trouble to meet his teachers and pupils each morning as he would meet mutual friends, but attempts to impress the whole school with his businesslike attitude. The parent enters the building for some purpose, and meets the supervisor, each attempting to appear as condescending a trifle, and not for one moment does either realize the great mutual relations that exist between them.

If school is the preparation for life, why should we not attempt to bring all of its factors into proper relations, be guided by accepted rules of etiquette, meet each other as we would were we friends as we should be, and deal with each other like intelligent human beings? If the supervisor could meet his teachers, and the teachers meet their pupils, on common ground — meet them as friends, treat them as friends, politely, pleasantly, socially; in fact, if they could bring all the school forces into a harmonious social unit, there would be no problems of school management.

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SOME PROBLEMS IN THE MANAGEMENT OF THE KINDERGARTEN.

Of all problems to be met in the management of a kindergarten, or indeed of any grade of primary work, those that relate to overcrowding are perhaps the most pressing. Setting aside the subject-matter, to teach well in any grade means to know one's children thoroughly, to be resourceful, and to maintain reserve force. The first of these three conditions demands, of course, a thorough psychological training, native keenness, and sympathy. But beyond that, to know one's children one must have an opportunity for acquaintance under working conditions. The teacher cannot know her children until she has seen each child under all the strains and stimuli of free, active employment. This means that the children must work in small groups throughout the school, but most emphatically in the kindergarten. We have here the little child with his abundant vitality, impulsive activity, slight moral restraint, and little power of reasonable control, open to suggestion as to winds that blow, wanting recognition from others, but with little capacity for social organization. This child is to be cared for. He is placed in a society where there is something for all to do. There is material to handle, and there are other people with whom to play. Having small power of co-operation on his own initiative, he must either play with a few, or, if he must associate with a large number, be dominated by one strongest force, the teacher. Ideally, the teacher is the confidant, the organizer of his schemes, the instigator of happy ideas, the source of supplies, or the court of final appeal—all by turns, as the case demands. With the small group this position is easily maintained. There may be play without excitement, and guidance without suppression, and often a quiet that is not generated by the calm of hypnotized consciousness.

The power to co-operate should grow normally greater as a child develops, but it cannot grow where the children are so herded together that for very safety's sake one leader must dic-

tate. Social organization can be imposed from the top down, or from the masses up, even in a kindergarten, but never the latter without the teacher's awareness of every unit in her social whole. She must have a personal contact with each one. So wide is the gap between the kindergarten as it is preached, with its vaunted freedom and self-activity, and the kindergarten as it is taught, that some wise friends of education have even advised that it be allowed to go. It has been asserted that, well proved as the plan is under right conditions, it is not tenable in our present public-school conditions. After the idea has in a measure permeated the school, modifying its régime, to retreat at this point seems a backward step — a step even the gravity of the present problem does not warrant. On the other hand, it would seem a grievous mistake to fix upon our public schools the name and institution with its essence left out. Especially is the need of retaining the original simplicity and freedom of the kindergarten important now by virtue of the universal need of striving for these same qualities through the other grades. There are many factors bound together in this question that need to be seen in their effects upon each other.

1. The public has tried the kindergarten and likes it. Parents want their five-year-olds cared for, made happy and more capable at public expense, which to most people means without immediate personal sacrifice. Hence the kindergarten seems likely to be grafted upon our public-school system — an achievement we all prayed for twenty years ago, but dared not hope to see.

2. The public-school management has found that, from a fair, honest, business point of view, it could not set apart a public schoolroom for the use of kindergarten children, to be empty one-half of every school day. They have seen that it was poor policy to equip the room with costly tools, rent a piano, hire two teachers, and then close it for one-half of the school time. This seemed unjust to the taxpayers of the neighborhood. It is perfectly reasonable and right to make the money so spent serve more children where children are sorely needing these privileges. Hence the establishment of two sessions, accom-

modating double the number of children and using the whole working day of one kindergartner.

3. It does not seem fair on the face of it to pay a kindergartner the same salary for three hours' work that her colleague in the next room receives for five hours' work. Consequently her salary for a half day's work must be on a lower schedule, in which case we must depend for teachers, either upon those who work and can afford to work as much for love as for money, or else upon those who know they are not fit for much and must take what they can get and be thankful. Kindergartners have been trained at considerable outlay of time and money. Two years is a good bit out of a lifetime from a young woman's point of view, but she gladly gives it, in most cases for love of the work, and of course for future gain. In countless cases young women of talent and ideas have gone into the kindergarten training schools through the dire need of some focal point for their energies. This has secured a certain element in the teaching profession which stands for good breeding, for culture, and for specific training. This element we must keep against all odds, but we cannot keep such teachers when they feel that, because of long hours and great numbers, they cannot do good work. On the other hand, many are now working under the name of kindergartners who have turned to the work because they could in the past see through this a means of getting a money-earning place in the world, meeting a minimum of formal educational requirements. They have usually little of either academic or professional training. These people we can well do without. This leaves out entirely a possible third class upon whom we should depend for a high order of work — the women of brains, who have had a costly academic education, and who yet cannot afford to choose this profession over the rival claims of the work of trained nurse, physician, journalist, or teacher in more advanced work. To this class money enough to live in a dignified and comparatively care-free way is an end not to be ignored, and three hours' work, with its corresponding remuneration, is not an attractive outlook. To keep up the standard of educational fitness, the pay of a kindergartner must be kept up to that

of other teachers. Nor does this reflect discredit upon her. But it should be understood that in her three hours she has parted with more vitality and energy than has the teacher of older children in the same length of time.

4. When paid the same salary, it seems only fair that her teaching hours should be but little shorter than those of other teachers. There seems to be no alternative.

These conditions array themselves in a perfectly logical chain. We want good kindergartners. To get them we must pay them as well as other teachers are paid. In that case, to be fair to the other teachers, we must demand of the kindergartners the same length of time in schoolroom work. Also, to be fair to the public we must keep the room full all day. But the bitter consequence is that we are *not* fair to either kindergartner or public. Not only should her hours be shorter than five, but so also should be those of first- and second-grade teachers. Not only should she deal with smaller numbers, but so should they. Not only should she deal with hand-work and active co-operation but so should they. But her lot is hardest of all and the defeat of her purpose more complete; for the younger the child, the more freedom he should have, and, deprived of it, the more does the burden of control rest upon the teacher. Many who have taught all grades of children will testify to this. This statement opens the whole question of the special needs of the younger children in school. Deprecating all division lines as tending toward artificiality and isolation in teaching, one is still compelled to admit that there is such a thing as a difference in the ability shown by adults in understanding the children better at one stage of their development than at another.

The root of these preferences in people of equal culture seems to be largely a matter of personal temperament or mental bias. It means often that the adult has kept young in attitude, that he can easily throw himself into *rapport* with the mood of a child. For educational purposes it is most important for the adult to be so strong in his knowledge of a child's equipment and mental life that he can imaginatively reconstruct it or assume it in a given situation, and look at an experience with the children from

their limited point of view. Only then can he know what the next step should be. Those who are "born teachers of little children" probably have this power intuitively. Psychological training added to native elasticity should make of such a person a rare teacher.

But give to even this rare teacher a group of from thirty to fifty five-year-old children, and at once her ability is at a discount. She can neither see each at his best nor each in the full self-expression that shows itself in co-operative work. She is cut off from opportunity to know her children. For one child is at his best in the rôle of an organizer; without the small group she cannot find it out nor utilize the power. Another may have great skill of hand; she cannot make it of value to his companions, as she could in a smaller group. A third might be a natural stimulus to the rest through his singing, and a fourth is a genius at story-telling; but the audiences are too big, and the morning is too short. The effect of individual expression is lost — an effect, be it understood, which must be exerted without adult comment in the way of reinforcement. Here are two great losses to the children and to the teacher.

The second great evil due to overcrowding is that the teacher comes to depend upon the impulses which appeal to the crowd, rather than upon those which call out individual power. Sometimes it is good to be in and of a crowd, to feel the sway of the impulse of the mass. But the individual is then likely to be under the influence of a kind of hypnotism — the hypnotism of numbers. The higher consciousness of the individual is at rest while he is taken possession of by the impulses of the crowd. To lead a crowd is usually to use the resources of the demagogue, no matter how legitimate the end in view. This is healthful, in the long run, neither for the pupil nor for the teacher. A notable example of the relation between mass-training and individual culture is found in chorus singing. To achieve certain effects, one must have the chorus. To achieve artistic effects, each singer of the chorus must not only have feeling and technique, born of individual labor and of individual criticism, but he must bend his interpretation to that of the master. He must subject

his individuality to that of the artist autocrat. Where would be the great artistic achievement of a chorus without the multitude of artistic units who are yielding all their musical perceptions and their preferences to the leader, and using all the fruits of individual technique to one end? Such a chorus is a great discipline, but chorus training and chorus work alone will never make it possible for the individual to get the value of the discipline. The illustration applies to almost all school life. Individual revelation, recognition, criticism, suggestion, must precede the mass-work. Individual training is possible only in the small group. The teacher who deals only with mass must tax all her resources in one direction. She must compel, excite, tickle the fancy, appeal largely to imitation; set up the one model and call all to follow it. As the only discipline, this fails to educate either in kindergarten or high school. But with the older children some other factors come in. It is legitimate here to appeal to conscious purpose or loyalty to a cause which can be attained only by subordination and mutual concession. These appeals or suggestions are made to a reasoning body when they are made to a class of children who have passed through six or seven years of school life. Eight years spent in a school ought to make integration from the children's own initiative possible in much larger groups. The eight years should furnish progressive training in democratic forms of control.

Even in the small kindergarten there are occasions when the resources of the teacher are taxed to the utmost; when, to make an organized group of the aggregation, she must use the greatest subtlety in reading the minds of all, and must be very quick to respond with the suggestions that will touch the springs of fruitful action.

The resourcefulness of the kindergartner need not be in the line of hypnotic suggestion, if she deals with a small group. She may give a turn to observation, or start a question, or modify action, if she has time or opportunity to see into, as far as one may, the meaning of each child's attitude or present problem. This does not mean individualism, but the individual touch that is absolutely necessary if the children are really to work together.

She must create conditions for impulses that are socially fruitful, and see that no counter-current prevents them from being carried out. The small power of resistance of new stimuli, the openness to all suggestion, the small power of reasoned control, the limited habitual control — all make children of this age extremely difficult to deal with. The integrating element is certainly the teacher, occasionally to be imitated, followed, and obeyed, most often to be an apparently passive following but informing force. This is the demand for resourcefulness — a resourcefulness that can be brought into play only when she has reserve force. When that is gone, she calls upon habit and ceases to deal originally with the taxing, trying, yet most important impulsive actions. When this natural fresh resourcefulness is worn out, the teacher is prone to misread motives and misdeal with situations. She half realizes this, and urges her wearied mind on frantically to rise to the occasion. Body and mind are at a strain, and the children react to it. Under the two-session plan, in which one teacher cares for one set of children in the morning and repeats her work with another set in the afternoon, all the evils referred to above appear at their worst. The children are herded; the teachers are too fatigued to keep apace of the individual child; the best teachers seek other fields, or take up other work.

There have been some attempts at meeting the questions involved, namely, to secure the same salary for the kindergartner that other teachers receive of the same general ability; to do this and yet demand neither much less work nor so much more that the children suffer the reaction; to do these things and yet to place the children in groups so small that the children can be dealt with as individuals. In some cities the plan has been to give the equal pay, and to give to each teacher two sessions with double sets of children, one in the morning and one in the afternoon. The invariable result has been to make the quality of work poor, to reduce the management of the children, to mass control. On the teacher's side there has been loss of health, and a steady diminution of the cheerful feeling of competence which arises from the sense of good work well done.

It is this that has made some even of the true faith lose con-

fidence in the function of the public kindergarten. A plan that has been tried in one city was to have the same children return for an hour each afternoon. These children were five years old, and lived near by, so that it was not taxing to either them or the kindergartner. Only thirty were permitted in a room. There was but one teacher, and she divided her time between two groups; a young girl aided in some of the work that could be easily performed by a maid whose wages were but two or three dollars a week.

This plan does away with one of the hopeless features of numbers. No teacher can be held responsible for cultivating one hundred souls a day, even in two sessions with an assistant. Many would prefer the thirty children and four hours' work and no assistant, to an assistant, and two sessions with forty children in each. The extra hour taught by the other primary teachers can be made up by the kindergartner in many ways not so trying.

A plan that might be tried where the kindergartners have a sufficiently broad training is to make them general assistants or, if their skill be great enough, general supervisors of hand-work in the primary grades. The contact with the older children would refresh the kindergartner and broaden her outlook. The help to the overburdened primary teacher would be great. It would make possible the forms of hand-work that are longed for but well-nigh impossible in the overcrowded first-, second-, and third-grade rooms. This plan also would make the spacious kindergarten room with its movable furniture, useful to the whole primary school.

If a talent for music, or for story-telling, or for dramatics were possessed by the kindergartner, it could find scope with other grades, and she would have a motive for further study that she does not always feel in her own grade. Surely that one individual something which each person has in some degree can be trained, utilized in some way, to the great gain of the school, while the kindergartner's particular strain of responsibility for a certain set of children can be rested. Suppose that one hour a day were used in this way, it would not be one-third so hard as to

teach children of the same age, following the same outline daily as in the morning.

While normal schools and teachers' colleges are so well equipped as many of ours are today for giving special training in drawing and painting, textiles, shop-work, music, and literature, it would be comparatively simple for the kindergartner to specialize in some one of these arts and return to her work with greatly increased scope. I know of many who have succeeded in adding to their usefulness without lessening the quality of the morning work. One young woman taught the singing in her village school and spent the mornings in the kindergarten; another helped in the drawing and painting in the primary grades after her own hours were over; and a third has returned to her *alma mater* to take postgraduate work in science, which she has been recommended to pursue in connection with kindergarten teaching.

Whether these suggestions for the solution of a complex problem are available or not, some way must be found to retain the simplicity and naturalness of the kindergarten, and to keep women of culture in the ranks of public-school kindergartners. Certainly this is a matter which will increasingly commend itself to educators for discussion and administration.

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INEFFICIENT TEACHERS.

A FAIRLY correct classification of nearly every corps of teachers would show a few who are excellent, a large number who are good, and another small class who are inefficient. It is manifestly important that this last division should be reduced to the lowest possible limit in every system of schools. Theoretically, it is not difficult to do this, but as a practical problem it is one of the hardest to solve in school management. "It is much easier to keep them out than to get rid of them after they are in," is a well-known proverb among school superintendents. Notwithstanding this caution, there are probably but few cities that are not employing teachers who ought to be induced to go into other business. In a few instances this is owing to the infirmities of age. Sight, hearing, and amiability of temper have gradually, but surely, failed under the annoyances and petty, but wearing, cares of the schoolroom. It is not easy to determine what should be done in these cases. The children are entitled to the services of the best teachers that can be secured. The schools are not maintained to provide a support for the old or the infirm. Still, school officials will hesitate to discharge the teacher who has given long years of faithful and efficient service in their schools. If a pension could be offered, the difficulty would be removed. But there are few places where this will ever be a practical remedy. The idea of pensioning the teachers in the public schools is not generally received with patience by the taxpayers. Nor do the teachers look with favor upon the plan of requiring them to make an annual contribution to a fund which is to be used to support their aged fellow-workers.

After all, the disposition of the old members of a body of teachers will never present a very serious problem. They will always constitute a small percentage of the entire body.

How can we get rid of those who have evidently made a mistake in choosing their life-work? Some have not that power of

control which enables the successful teacher readily and easily to govern a large school of active children. It has been said that "children are not sent to school to be governed, but to be taught." This is true, but it is just as true that they cannot be taught in the ordinary school unless they are governed.

Another class of teachers are good instructors, but irritate parents and children by cutting words and fussy, petty rules and requirements. Then there are those who are deficient in teaching power. Everything is presented to the class without life and spirit, and dulness and stupidity are the prevailing characteristics of the school.

It would seem that it ought not to be difficult to make a change where it is clear that a teacher is not able to render efficient service. When satisfied of this fact, certainly a board of education will be anxious to secure someone who can give better satisfaction. Yet it is a fact that nothing is harder to bring about in a quiet and peaceful way than this very thing.

A few years ago the superintendent of one of the important cities of Illinois recommended to the board of education that three or four teachers be not continued for the coming year. The board adopted his report, and he left on his summer vacation. When he returned he found that all of them had been reappointed. He accepted an offered position in another city, where he is still discharging the duties of superintendent.

In another case it was recommended that about 3 per cent. of the force be discontinued. The report was accepted, and new teachers were appointed. During the vacation several teachers resigned for various personal reasons. When the question of filling these vacancies came before the board, it was found that, owing to persistent appeals and the use of influence, the poorest teacher of those dropped in the spring had been promised the first vacancy that might occur. To prevent injustice to the others, the superintendent suggested that all of those displaced be reinstated, and it was done by a unanimous vote of the board.

It would be unfair to the members of these boards to infer that they were dissatisfied with the recommendations of their superintendents, or that they desired to retain poor teachers in

their schools. The members simply lacked the requisite backbone to enable them to withstand the importunities of interested parties.

A gentleman who had presided over the educational affairs of a state and of two of the larger cities of the country gave his experience in these words: "Two subjects alone have given me trouble in school affairs — text-books and teachers. When I have attempted to remove either, unpleasant complications have generally arisen."

After an experience of more than forty years in this city, the writer is willing to advise young superintendents to touch these subjects gently.

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PROBLEMS OF THE INSTITUTE.

THE question of the teachers' institute is receiving a good deal of attention from educators at the present time. The discussions indicate general dissatisfaction with the manner of conducting the institute and with the practical returns made in consideration of its cost. The teachers themselves largely feel that much valuable time is wasted by them in these gatherings. They say the work done is either a "rehashing" of what they have had year after year, or is lacking in practical bearing. The truth of these charges can certainly be verified by those of us who have attended in any given locality the county institutes held for several successive years. The lecturer who inspired us in the youthful days of our school-teaching lost our interest the next year when he went over the same ground, and our eyes were a little more opened to the fact that what he said had little application to things as we had found them in our school and neighborhood.

On the other hand, institute men and educators generally are finding fault with the situation. They are questioning the value of the week they spend in doling out a little bit of this or that pedagogical pabulum on various topics, or in dealing in glittering generalities about "human life" and "problems" of the school and social situations. No one feels more dissatisfied with his work or himself than the person who has had the experience of standing for two or three hours a day before a bright-looking, but passive, audience for a week, and finds Friday night come without his having elicited a single visible reaction or response from his hearers. If he is especially sensitive or young at the business, he packs his grip and sneaks out of town. Of course, there are the private little talks with the few who have questions, and whom he has been fortunate enough to hit in his blind firing —and then there is the fee!

Well, the fact is the institute, as we have it at present, is a fossil. Its life-history belongs to a time when conditions were different from the present. When the teaching element and

interests were more largely rural in their make-up than they now are, when facilities for academic and professional instruction were not general, and when summer sessions of regular institutions were not within reach of practically all teachers, then, indeed, the institute performed a positive function as a means of conveying valuable educational material. In the days when Horace Mann came into Ohio, and just prior to that time, there was need of this institution, and it had a great field of usefulness. In such conditions as these the institute had its day. It served its time as well as might be expected of one of the stages in our educational evolution.

Simply because an institution has been useful is no reason for keeping it alive after it has served that usefulness. We need in this as in all other practical affairs constant reorganization to meet new demands. The standard of requirement for teaching in most states has been raised. It takes generally more knowledge than a mere country-school education to secure the proper credentials to teach. Professional training has been made possible as a preliminary prerequisite, and general enlightenment and all sorts of facilities for the spread of culture have given teachers opportunities undreamed of a couple of generations ago. The institute, then, in the form it has been handed down to us, is out of place. It is an expensive relic preserved in our school system. The social aspect of these gatherings often outweighs the instructional and professional sides. There is a chance for the teachers of a given county to come into touch socially with each other and the superintendent, and in some degree to come into a unity of thought and purpose. But even in this, under our present arrangement, there is only limited opportunity, for throughout the sessions the attitude is mainly a passive one, and teachers seldom give expression to the problems peculiar to their own conditions and surroundings.

It might be considered an exaggeration to say that the institute, in its present condition, as an educational force is valueless; but it certainly would receive general assent to say that it could be made very much more efficient. If it is to remain, it must be radically modified, and that soon. In recognition of this

fact, modifications have been made in a number of states, and the institute is being brought under some definite control. The present state superintendent of Indiana last summer sent a circular letter to all persons interested in conducting the institutes of that state, in which he submitted certain propositions to be discussed, and called a meeting for that purpose. There seem to have been two especial points to the plan considered: first, that the instructors in institutes of the state form an organization of some sort with a view to their "mutual improvement;" and, second, that the work should be given in such a way as to form continuous courses covering periods of about four years. The practical value of the first point is rather doubtful as long as county superintendents are allowed to hire whom they please for this work, regardless of whether he belongs to the organization or not. There might be value in it from a moral point of view, but there would be need of official or legal recognition of such a body of instructors to make it effective. As to the second point, there is no doubt that it is a wise step in the direction of introducing systematic control into the work. It is to be hoped that the superintendent can carry through such a reform in the management of institutes in his state.

It is not the object of this paper to suggest specific lines along which the institute is to be conducted in order to make it conform to the educational requirements of the time. To do this would involve one in the difficulty of trying to meet conditions peculiar to local communities; and these, after all, must determine the character of the institute. There are many practical questions to be answered by anyone planning to improve the work, but which I shall not attempt to answer. The matter of the teachers' preparation and experience, and how to recognize these, is a first essential consideration. How much the teachers should be required to do; what lines of work should be taken up, and in what way they are to be presented — these belong to local conditions to answer. Whether the institute shall be held in the summer months, and before schools open, or after the work has actually begun and problems have arisen in the minds of the

teachers; the question as to the length of the institute — these also will have to be determined by the needs of each community.

In these general considerations, whether of instructor or of method of presenting subject-matter, the fact must not be overlooked that one of the most potent elements in determining the character of the institute is the county superintendent. The educational value of the work rests mainly with him. His spirit and attitude form pretty largely the standard by which the teachers judge the work of the instructor. His professional interest and common-sense in the selection and arrangement of material determine almost entirely what value the institute will have for the county schools. Of course, in a state without this officer more necessarily devolves upon the initiative of the teachers in the selection of committees, but the criticism would hold here as well as in the case of the superintendent. It is hardly necessary to say that system, however good, can never take the place of live educational interest on the part of the local officers.

But whatever modifications are made in the present institute, if it is to be continued at all, must recognize certain fundamental conceptions in educational activity and modern social conditions which are now being disregarded in the work. First and most essential of these requirements is the necessity of recognizing in the conduct of the institute the pedagogical principles underlying present-day teaching. It may seem rather strange to make such a comment in this connection. It would sound as if the teacher of teachers had not been following such pedagogical principles in his work. This is just the fact, however. There is scarcely anything less pedagogical than the work of the ordinary institute. Why the institute lecturer should violate nearly all the canons of modern education is strange, considering the fact that he talks so glibly about these same principles. Very likely he will preach "self-activity" in education, and strictly assume a passive set of individuals to teach. He pours forth his thoughts, if they can always be dignified with that title, without considering whether these meet a response or not. If he can perform the antics of a clown, his listeners are tickled into following him, and may think they have received a great deal, whether they have

or not; if he is dry and tedious, they yawn as he proceeds and cheer when he is through. In either case, however, little consideration was given to the active side of the learning mind, and no advantage was taken of the problems that existed in that mind. The monstrosity of the contradiction between what we preach and what we do comes to the surface here very forcibly. The process is a most striking demonstration of our tendency to think old thoughts into new terms and feel secure in our grasp of the growth of educational ideas. Although we have long since thought that we had given up the notion that education consists in the mere accumulation of information and the belief that the learner should merely absorb, we proceed to disregard these facts in everything but words, and give forth our bits of stuff and our little classifications without considering the point of view or the problems, or lack of these, on the part of our hearers. Our grasp of the principles we are setting forth has not worked itself out into our life and practice. This is the why of so few responses and reactions. The teachers have come to regard this as a filling-up time, and the only reaction is the notebook and pencil. What reason is there if teachers do poor work in their schools? Certainly none, if they depend upon the institute for guidance. We ask the teachers to assume that education depends upon self-effort and the reactions that naturally follow from having a question or problem to be answered, and yet we lay all this aside when we do our teaching with them.

This is merely saying that, when the instructor goes into the institute with his line of work prepared without reference to the individuals there, he has no basis for knowing how to make his work of value to them. The teachers with their various grades of preparation and experience are treated on the same plane. Their needs and questions do not form the starting-point and groundwork for discussions. It is not a question of how valuable or sound the ideas presented by the lecturer are as such, but it is a question of initiative, a question of whether the teacher is to be an active or passive member of the body. It is almost universally true that the teachers are wholly passive, and, especially where they are compelled by law to attend the institute, are also

submissive to all vagaries advanced. The work must be changed to meet the active interest of the teacher as the basis for instruction, as it is in the case of the pupils in the best modern schoolroom. The instructor shall use the same principles of educational practice that he advocates for the use of the teacher. This failure to realize practically the essentially active characteristics of learning is the most serious defect in institutes, and no amount of pruning or bolstering up in other directions can remedy it.

A second violation of educational principles is like unto the first, namely, the haphazard characteristics of the material usually presented in the institutes. I refer to the plan of taking up work on which the teachers have made no preparation, or which has no definite relations to work they have already been doing, and on which they cannot have many questions. Whether this be by a single lecture on a topic or by a series running for the length of the week, the point holds good. This may be obviated by the plan referred to above, offered by the superintendent of Indiana, of having a course continued through three or four consecutive years. Here the institute will form a clearing-up place for the difficulties that have arisen in the course during the past year, and also a place for mapping out further the work to follow. Thus, if problems are presented or material assigned, say at the beginning of the year, which are to be worked on by the teachers of the county for that whole year, then the institute will be the necessary and valuable place for bringing these things together. If teachers have worked on some topic, or even some book, during the year, and if the instructor comes prepared beforehand for this particular phase, then there is opportunity for teachers and instructor to meet on known ground and for the instructor to be of real service in guiding discussion along profitable lines. But I insist that, unless some such consecutive plan is followed, unless the field was mapped out and prepared for in advance, and unless the teachers bring questions of their own to be worked on, the institute week will be but a poor excuse for the old and formal "pouring-in" process of instruction.

Any improvement in the institute must also be in line with the notions that have come to regard teaching largely, after all,

as a matter of attitude. It has come to be seen that method, whether in the sense of the manipulation of devices or the "one and only" process, is of less importance in constituting one a teacher than is the point of view, the spirit, or the atmosphere of the individual. A week is too short a period to hope to accomplish much in positive instruction, particularly when there has not been a common preparation of both instructor and listeners, as suggested above; but it is all too long to devote to what is generally got in the talks on the method of teaching this, that, and the other subject. If we are to have the lecture, pure and unadulterated, let it be rather on general culture and matters of significance in daily life. Method in the schoolroom and method in life are not so vastly different, after all, and a good clear view of the one is pretty nearly sufficient preparation for the other. Less of method and more of attitude and appreciation will be a change for the better in most of our institutes where the lecture is to be continued as we have it. Of course, this point is very largely a matter of the individual instructor, and since there is no way of controlling him at the present time, we can only hope he may catch the spirit of modern method and improve.

The institute must further be made to conform to the fact that the rural teacher, as he was in the days of the origin of that institution, is no more. What with our city schools and consolidated rural schools, what with our spread of intelligence and educational institutions, and what with present-day views of educational thought and practice, there is little need for an institution that keeps all the characteristics and methods of an older period. It is folly to hold on to an organization that was part of a system calculated to set off the teacher as a personage apart from ordinary life and affairs, and to make him a peculiar social class. Like other folly, it is a costly thing.

In summary, then, I should say that the institute in this older form, and as we have it represented almost entirely, has served its principal usefulness; that it still exists, and may continue to exist, because of the difficulty we find in changing the old after it once gets fixed as an institution; and, further than this, that the values which are mainly of a social nature are outweighed by

the perpetuation of misconceptions in teaching and true education; and, finally, that any change of the institute for the better must come by the recognition of fundamental conceptions that modern education has worked out. That the change is needed few doubt, and to say that it must soon come is merely to give due credit to the common-sense of the men and women engaged in the teaching profession.

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THE DEVELOPMENT OF A VOCABULARY.

AMONG the many murmurs of dissatisfaction that arise today concerning the results of the teaching of English in our secondary schools is a constantly recurring one of the lack of power of young people to use words with any effectiveness. The complaint is urged with growing frequency that the increased effort of the last ten or fifteen years along the line of language work has not produced results commensurate with the time expended, and that our students have only a thin and meager vocabulary with which to express their thoughts. Even in the high-school period there is a lamentable want of interest in exact, forceful expression. Curiosity with reference to word-usage is so rare as practically to be non-existent. There is no effort at experimentation with language, but rather a ready acceptance of the old and familiar, and an apparent desire to say the thing in mind as easily and quickly as possible and be done with it. Even in the widely prevalent and constantly increasing use of slang the same carelessness and indifference to word-values are perceptible, the meaningless, pointless phrase passing muster quite as rapidly as that which from its terse vividness deserves acceptance. If these criticisms are well founded — and there seems to be little room for doubt — they call for serious consideration, for the failure to acquire a fairly large working vocabulary, or, what is more serious still, the failure to desire such a vocabulary, is a graver charge against our teaching of English than appears on the surface. There can be no question that one of the chief aims of education is to develop the power of clear, definite thought. It is the function of language to assist in this process. This being so, there can be no justification for such emphasis as for years has been laid upon language work, unless its results are to show in thought-power. Given any real expansion of thought and expansion of speech will necessarily follow, for so closely connected are language and thought that no separation is possible. The development

of one means the development of the other; a failure in one, a failure in both.

In attempting to get at the root of this lack of success two considerations are of special importance. The first is the symbolic nature of language. This should never be lost sight of. Words as existences, as separate entities, are of no moment in the development of thought; the fact of prime importance is that the word is sign of an idea. It is because words have meaning, because they stand for something, and further because they are the only possible instruments for thinking about the meaning which they symbolize, that the development of a vocabulary is so vital a thing in the development of thought, and that haziness and inaccuracy in the meaning and use of words inevitably mean a like haziness and inaccuracy in thinking. Since this is so, the matter of the acquisition of words becomes a matter of acquisition of meanings. It may seem at first sight unnecessary to lay such emphasis upon this symbolic character of language, as if it were so fundamental a matter that it could not be overlooked, and yet it is to the very neglect of this close interrelation that we owe much of our failure so to teach words as to make them a vital aid in the development of thought. In our earliest effort to assist children in gaining a vocabulary we make much use, and rightly so, of the instinct to imitate. Even in the later stages of word-growth it may still be a very prominent factor, but it brings with it after the first years a danger that we should be more quick to perceive and guard against were this close connection between words and meaning always in our minds. Words may be memorized as parrots memorize them; words may also to a certain extent be used as parrots use them, in combinations correct in form, but empty of meaning. Such word-usage cannot be the result of clear-cut, definite conceptions, nor can symbols so employed be a means of thinking about the ideas for which they stand. Far from aiding in the development of thought, they are rather that which destroys thought by destroying attention to it.

The second consideration calling for attention in our desire to find a sound basis for our work is the language equipment

which the child possesses at the time of entering school, together with some knowledge of the way in which he has acquired his stock in trade. Not until something of this is known can certain vital questions be answered that present themselves to teachers at the very beginning of language training: What shall the nature of the work be? How much clear and accurate verbal knowledge ought to be assumed? Is the emphasis to be laid on the acquirement of new words and meanings, or is it necessary to spend time and effort in making old words more definite, in clarifying old meanings? And how shall we work — shall we enlarge and renovate a child's speech in the way it was formed, or shall we invent new methods of procedure?

Certain general steps in the growth of a vocabulary can easily be traced. Since all acquirement of language in the true sense of the term is an acquirement of meaning, and since meaning is the establishment of a fixed relation between a symbol and an idea, the development of speech is dependent upon association. In the first babblings of an infant, in the child's first imitations of the sounds of words, there is none of this; but so soon as he begins to link together names and objects of sense-perception so closely that the one suggests the other, his acquirement of meaning has begun. For some time his additions to his vocabulary are words symbolizing elementary modes of sense-experience; he is in the perceptual stage, and his field of consciousness is filled with sensory and motor impressions, with perhaps their simplest emotional accompaniments. On the language side of his life his whole effort is given to naming his world. But the rapidly expanding mind of the child is not long content with this simple process. At first he sees objects singly; soon he begins to see them in combination; before we know it relations begin to dawn upon his mind, simple ones first of contiguity, then more complex ones of similarity and contrast; and finally, as he gains power to abstract from an object the characteristics that distinguish it, he slowly becomes conscious of likenesses and differences, not only between objects of sense-perception, but between relations as well. And hand in hand with this growing complexity of thought goes a corresponding growth in

language, without which any steady advance in thought-power would be impossible. New ideas are fitted with appropriate symbols, by means of which the child may fix his attention on them or bring them once more before the mind in ideal representation, that he may proceed to further analyses and syntheses. Now if this were all, if the child progressed only in such orderly fashion as here indicated, acquiring new ideas only as his experience widened, fitting to each new thought a symbol, and testing its appropriateness by his ability to make it serve his ends, storing up the useful and true for future needs, and rejecting the false, the work of teaching language would be much less difficult; but no such beautiful simplicity exists. Nature in decreeing that man should be an imitative animal, endowed him with the power to work out a system of copies for his use. To a certain extent the child may recapitulate in his development that of the race; by means of this copy system he also outstrips it by leaps and bounds. And one of the most important of the models which civilization has furnished for the use of the learning child is the vocabulary he hears about him. He does not wait to gain words as he needs them; he discovers great bodies of them in use about him, as well as numberless interested friends eager to teach him to utter them in his babbling tongue, though unfortunately for his later use of language, less eager to be sure that each word has its appropriate value. With some of these new acquirements he absorbs at once a meaning, or it may be he invents general meanings to fit the general speech about him. As time goes on, by a process of delimitation, the result of testing by experience, he makes more and more particular these vague generalities, until his use of words approximates that of society about him. Now, if it could be certain that at the beginning of the school period this process of clarifying had been thoroughly done, that to each word acquired had been fitted a clear and definite meaning, our line of work would be easy to decide. Can we be sure of this? Do we not know from the amusing mistakes of children how much greater is the memory for verbal sounds than the knowledge of meaning? The failure to recognize this is the cause of much of our failure in the teaching of language. We start

in assuming knowledge that does not exist: we continue to assume that knowledge all along the line. What wonder that by the time the high-school period is reached we are met with hazy, indefinite thought!

So the most important work of the teacher of language is to make sure that each word bears for the child clear and definite significance, and at the same time to increase as rapidly as possible his stock of such definite conceptions. How shall this be done? So far as possible by following the child's own method of development. The order of mental growth is real knowledge before verbal knowledge. A child in his first efforts to gain a vocabulary is in the realm of present experience; so should he be as much as possible in his first school years. The old pedagogical maxim, "things before words," "words through things," had lost none of its weight. Instead of giving to language work the place of chief honor in the curriculum, let it here seem to be subordinated to the enlarging of personal experience; let the child's main interest seem to be the discovery and appropriation to himself of new truths, and let speech grow by natural development out of the desire and the effort to communicate to others his newly attained experience. In the beginning there will be a continuation of the earlier process of naming things, valuable in proportion as the symbols are directly significant because of first-hand experience with the objects for which they stand. The nature work of the lower grades furnishes plentiful material for this training; it also presents a grave danger that has not always been avoided. To begin in the perceptual stage of sense-experience is good; to remain there is a grave error. The whole trend of education should be in the direction of conceptual thinking. Clear perception there must be, but only that the resulting conception may likewise be clear-cut and exact. So along with this process of seeing objects and fitting to each its correspondent sign, must go constant training in the discovery of relations and the finding of appropriate symbols with which to give them expression. This work also should be as much as possible with objects of sense-experience, since only by this means can new words have direct significance. The question

arises in this connection whether it is useless to attempt to describe or explain that which the child has not personally experienced, whether it is impossible by means of conceptions already embodied in language to gain new conceptions. To a certain extent this may be done; under the guidance of the teacher a child may put together certain qualities or characteristics already directly experienced and by an act of synthesis gain an indirect conception, but it is a pale and ghost-like shadow of the idea gained by direct experience, and all such teaching should be with a clear recognition of its limitations.

In connection with this matter of the perception of relations there is suggested a weakness in the thought and expressional life of young people which results from insufficient training in this respect. From the simple mental operation involved in seeing that the rose is different from the lily, but that both are flowers, to the subtle, exquisite similes and metaphors of the poet, may seem a long step, but the thought-process in each is the same. Much of the beauty of poetry comes from the rich suggestiveness of its figures of similarity and difference; much of the lucidity and convincingness of the best prose is due to the power to suggest the same relations. One would be slow to say that by continued practice in the detection of relations of likeness and contrast could be produced the illuminating images of a Shakespeare, a Tennyson, or a Ruskin; but there is no question that by constant practice in seeking these relations, and by continued effort to give them expression, much can be done to develop that power which is too often thought to be the exclusive endowment of the literary artist.

A further consideration needs attention so soon as children begin to read. In order that the printed word may have full significance and meaning, its context in the sentence must be grasped: the relation of each symbol must be seen to the other symbols comprising the sentence and to the sentence as a whole. Much of the inability of young people of today to extract the meaning from the printed page is due to failure here; much of the failure is due to misdirected effort on the part of the teacher. There is no lack of laudable endeavor to give significance to

words; the conscientious, persistent teacher may even achieve a commendable interest on the part of his students in the dictionary, and still the trouble may be untouched. While the child was in the stage of indicative communication, using only isolated words to suggest his meaning, he was not yet in the realm of speech as such; not till predication began did he enter the field of language proper. So with definition. That kind of exercise, unfortunately still too common, which separates a word or phrase from its context and considers it apart from the relations involved, not only does nothing to advance the acquirement of meaning, but destroys gradually any true conception of the inseparable relation of words to thought.

And so we come back once more to that which is at the root of this whole matter — the vital and indivisible connection between thought and words. It is only by constant emphasis upon this relation, that we may in time hope to give to our young people the help that should be derived from the study of language. Once this is clearly grasped, every reading lesson, every object-lesson, every right use of a text-book, every recitation, whatsoever its subject-matter, becomes a lesson in language, in that it should aim to fit definite, accurate meaning to the printed or spoken sign, and to find exact symbols to express the particular ideas under consideration. And not until this close and vital connection between thought and language has become more than a vague pedagogical theory, and teachers will recognize that the matter of acquirement of definite and exact meaning is the concern of everyone who undertakes to teach, no matter what his subject, can we hope to attain that development in the use of language which alone makes possible any considerable development of thought.

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RE-EXAMINATION OF TEACHERS.

RECENTLY, in a discussion on the teaching of English to foreign-born adults from southern Europe, one speaker referred to their unreadiness to express themselves about tangible things, and their readiness to pour forth their ideas on intangible subjects, such as life, death, immortality. In reply to the question whether things that interest us are not to us the tangible ones, the speaker seemed to favor "the things I have done today" as being more tangible than those reaching beyond the environs of this mortal life. This tangible topic brought to mind the attempts of another speaker to induce a girl who worked in a sweat-shop to expatiate on the things she had done during the day, but the poor girl, with her dull routine, less the intangible, could only reiterate her one all-comprehending refrain, "I sewed pants."

The first speaker's ideas of the tangible and the intangible seemed to rest on a sharp distinction between conduct in life and the thoughts about life that lie back of and determine that conduct. There are many who hold similar views regarding the tangible and the intangible in the work of teachers. They count the methods and results among things manifest, things falling within the realm of the judgment of a supervisor or a superintendent. The teacher's scholarship, on the contrary, is classed with things intangible, alien to those conditions that are involved in the making of a judgment by a superintendent or principal. It is because of this remarkable attitude toward the obvious in the work of the teacher, and the pervasive which determines the obvious, that we hear of superintendents who subject those whom they regard as successful teachers to a written examination from time to time in order to determine their mental status. Laughter would greet the person who should suggest giving a written examination to President Eliot of Harvard, to find out whether, with the numberless demands made upon him and his time, he was keeping up to his highest possible

mental level. People would exclaim: "Look at his work! Only a scholarly mind can do such work!"

The kindergartens, the private schools, the colleges, the normal and the technical school, the medical and the law school, the universities — all recognize the relation of scholarship to successful teaching. None of these educational organizations is so dull to the influence of the mental content as to examine the successful teachers within its gates in order to determine whether they should receive an advance in salary. A few years back there appeared an article, based on interviews with college presidents, about college faculties. These interviews brought to light the fact that every college president sees in the faculty of which he is the head, members who are unsatisfactory. In moving about among the students in the colleges, schools, and universities, one soon learns that the students know who are the instructors with something new to offer, and who have struck twelve. Evidently, in the higher institutions, the practice of examining teachers from time to time in order to determine the status of their scholarship is unknown, not because all instructors are keeping abreast of the advance in their subject, but because scholarship, the mental content, is known to be a tangible element in the work of a successful teacher.

In the continued endeavor of the public schools "to better well," there have been introduced at different points, under one guise and another, means for determining that which in the work of teachers is intangible to some superintendents, *i. e.*, the scholarship behind that work. The examination which is supposed to keep teachers up to their highest possible level, or to inform the superintendent of that which is to him imperceptible, strikes at the fundamental positions of modern psychology and educational principles. It rudely separates one's knowledge from that which one can teach intelligently. The two are inseparable. This statement does not impugn the truth of the well-known fact that scholarship does not necessarily make teaching its mode of expression; it affirms that successful teaching is one mode of expression of a valuable mental content.

Recently, in a gathering of teachers, two college presidents

stated emphatically that teachers should be treated as are the workers in all other lines; that, after passing the examination for a certificate to teach, they should be judged on the merits of their work only. The position was well taken; but the invidious distinction implied between teachers and other classes of workers, by the promotional examination plan, is not so serious as is the subtle distinction made between scholarship and power in successful teaching.

The conditions attendant upon the conduct of systems of schools are often perplexing, and the onlooker must recognize the efforts of a superintendent to maintain a high standard of scholarship throughout the corps of which he is the head; and yet, while openly expressing appreciation of the earnestness that struggles for better things, one must regret any indications of the absence of an intellectually sympathetic study of the situation before taking action. Scholarship can never result from cramming for an examination. Neither professional nor cultural studies lend themselves to the method of cram. For many years Colonel Parker went from East to West, from North to South, pointing out the evils of cramming for an examination. All that he urged concerning those evils in the mental life of the child is true in the mental life of the teacher. It is well to organize the work of the schools so that teachers shall feel the influence of a great spirit and know that much remains for them to accomplish. But, on the other hand, the enlarged interests of teachers must be reckoned with. Scholarship should not be counted as dross to be refined at the examiner's desk; it should be known as an impelling force back of the work, and also as part of it. It should not be set up for separate measurement as lying outside of successful teaching. The set examination, given for admission to the schools, is necessary. Further sets of questions are mere makeshifts, usurping the place of that personal acquaintance with the work of teachers which the superintendent should esteem it a duty and a pleasure to have.

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BOOK REVIEWS.

The Possibility of a Science of Education. By SAMUEL BOWER SINCLAIR, Vice-Principal of the Normal School, Ottawa, Canada. Chicago: The University of Chicago Press, 1903. Pp. 126.

THOSE who are familiar with Dr. Dewey's educational philosophy will recall the frequent reference that he makes to the educational process as "the reconstruction of experience." It is this idea, and what is involved in it, that Dr. Sinclair uses as a tool in the treatment of the various phases of the discussion of *The Possibility of a Science of Education.* His problem is this: Can there be a science of education? Do we have such a science today; and, if so, is it of any service to the teacher? After a brief statement of his position, the author considers the popular criticisms urged against the professional training of teachers, showing that they are due to a misstatement of the problem, to a lack of knowledge concerning the actual facts, to defects in existing training schools, or to a static view of education and of science.

Chaps. iii and iv are devoted respectively to the dynamic conception of science and the dynamic conception of education. The author rejects the static conception which makes science an end in itself, and adheres to the dynamic or functional conception which "holds that it is impossible to divorce theory from practice." He believes that the object of scientific investigation is to state controlling factors in the realization of ends; that the scientific attitude originates in the "attempt to control processes of observation and interpretation, and to avoid error and get at maximum certainty;" and that "laws are of especial value, not as possessing finality in themselves, but as abstractions made for purposes of control." The several theories that have been current during different epochs are reviewed in the light of the philosophical systems which they respectively reflect. The superiority of the dynamic conception is shown to be due to the fact that the individual is ever changing, that "in the forward movement of experience the shifting of the focus of the present reveals constant change, constant growth." The dynamic conception of science is applied to education so as to show that "educational science arose from an effort to gain control of the educational process, to secure instruments of insight which would enable the educator to make the wisest selection of aims and means." His position regarding education as a science may be seen in the following statement: "It is not claimed that there have been, or can be, discovered educational facts or laws which when memorized will enable the teacher to posit with certainty the best method of procedure in each particular case. The contention is that by following a certain course of preparatory investigation the teacher will gain such insight as will enable him to understand the particular situation in its complex bearings — its needs and the proper mode of response — in a way that would have been entirely impossible without such preliminary training." The author thus bases his argument for a science of education upon the fact that there is a purpose in education, that there

are instruments by means of which this purpose can be accomplished, and that the control of these instruments involves careful and continued investigation. "Failure to realize this fact has resulted, on the one hand, in an empirical procedure, depreciating all experimental work, and, on the other, in experimentation of an unscientific character."

The most valuable part of the book is the discussion of educational aims and means and the psychological factor. Each of these subjects is discussed with reference to its function in the "reconstructive process." Emphasis is placed upon the dynamic conception of education, because it is that which transforms what might otherwise be empirical, if not mechanical, activities into an intelligent and orderly process which is worthy to be designated as scientific.

The unity of individual experience is reviewed as it is manifest in the stages of individual development. The later stages are shown to differ from the earlier not so much "in the quality as in the complexity of the experience which reveals itself." For instance, "in the period of later *infancy* the characteristic unity may be said to be the *story*, the present, direct response. In the period of *childhood* it is found in serial order, a relation of means and ends, a history or a scheme, which toward the latter part of the period throws emphasis on *skill*, as the attitude becomes increasingly mediated and indirect. In the *youth* period the unity may be said to be *law, abstraction, generalization;* there is a tendency to seek truth for its own sake, to probe into the hidden meaning of things, to develop technique in a scientific way, and the activity becomes more and more reflective." The unity of experience running through these stages is more apparent when it is considered that perception, memory, imagination, and thought are not regarded as isolated faculties, as in the old "faculty psychology," but as stages of development that are present implicitly or explicitly in every attentive act. "Voluntary attention differs from involuntary in the complexity of the operation." Feeling, knowing, willing are but the three aspects of one experience. "A proper training of one factor means a training for all the others, a correct method of acquisition of knowledge will at the same time afford volitional and emotional training."

Since all teachers use some method, whether they are conscious of it or not, the author emphasizes the importance of the use of those methods which are adapted to the problem in hand. Rejecting imitative methods, except in cases where they are used to "eliminate a number of elements or factors of purely individual experimentation," he argues that method can become an instrument of control only when the teacher understands the conditions which affect the case in question. This involves, on the one hand, a knowledge of the child and his surroundings, and, on the other a knowledge of the subject-matter, the experience which it is the function of the teacher to translate into a form that can be appropriated by the child. The dynamic conception of education makes a demand upon the teacher for more than an ordinary knowledge of the subject. It is necessary for the teacher to know, not merely the subject, but its genesis, and the logical and psychological relations that are involved in a suitable presentation of it to the learner.

To understand the conditions most conducive to educational activity, the teacher needs knowledge that belongs to many different sciences. That which belongs to the science of education is that which is essential to giving the teacher such an insight into the fundamental problems that she is sure to meet

as will enable her to deal intelligently with particular cases when they arise. This fact is illustrated by showing the difference in the attitudes and the methods employed by two school principals, one of whom makes use of the static conception in classifying a pupil, and the other of the dynamic conception. Several illustrations are also given of ways in which the training that is given in the best teachers' training schools is of service to the teacher in school management and in teaching.

In the closing chapter, which treats of the technique of educational science, the present status of education is reviewed, the influences detrimental to its growth pointed out, and improvements suggested. A compilation of the best of what is being done and has been done is urged, in order to give the student of educational science a fair start as compared with students in other departments of scientific research. The chapter closes with illustrations of the development of educational technique, and a treatment of the subject in professional training schools.

It is unfortunate that a book which contains so much of what is vital in the solution of educational problems should be written in a style that obscures its meaning. In addition to the difficulty caused by the frequent use of technical terms, there is that which is due to frequent digressions from the main line of thought. Had more care been devoted to the arrangement of the material presented, a continuity of thought could easily have been secured which, doubtless, would have relieved the author from the necessity of using argument in places where those most likely to read the book would prefer exposition.

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Geographic Influences in American History. By ALBERT PERRY BRIGHAM, A.M., F.G.S.A., Professor of Geology in Colgate University. Boston: Ginn & Co., 1903. Pp. x, 366.

THE worth of the geographic factor in accounting for the industries, political history, leisure pursuits, and the character of local and national communities has been under discussion for a great many years. We are told that "character is a function of latitude," that "a man is what he eats," that, in short, climate, topographical conditions, and physical and social environment determine completely the mode and nature of human activities. And while this is still a subject of discussion which has not been settled in favor of the affirmative, it is commonly granted that geographical conditions do play some part in the development of communities and nations. As indicating some of these influences, and their effect, upon American local and national life, the recent work of Professor Brigham is of more than usual interest.

His method of presentation is simple. The plan evidently is first to present geographic conditions and then to show how history is made and influenced thereby. For purposes of treatment the book is divided into twelve chapters, and each chapter, except the last, which is not directly relevant to the general theme, deals with a distinct geographical unit; or a group of units, as the ones on the Civil War and on Geography and American destiny. The headings of the chap-

ters will represent in a somewhat rhetorical way the divisions intended. These are: "The Eastern Gateway," "Shoreline and Hilltop of New England," "The Appalachian Barrier," "The Great Lakes and American Commerce," "The Prairie Country," "Cotton, Rice and Corn," "Where Little Rain Falls," "Mountain, Mine and Forest," "From Golden Gate to Puget Sound."

The underlying assumption is that human effort in pursuit of its aims and vocations follows the line of least resistance, and if necessity and this resistance compel it, it will change its more immediate aims and vocations in conformity thereto. This explains, for instance, the importance of the only adequate gap in the Appalachian barrier, the Mohawk valley, the Gateway of the East. On the eastern seaboard lay New York with its magnificent harbor, land-locked and ample, with its central situation and unlimited terminal facilities. And away to the west of the Appalachians stretched two thousand miles abounding in game, teeming with interest for the adventurous souls of old New England eagerly anxious to be in the vanguard of the host destined later to people its fertile extent. Hence the desire for a feasible route, and the importance of such a route when once it was found adequate. "The meaning of the Mohawk valley is that the entire region of the Great Lakes and the vast prairie and mountain regions of the West became tributary to the rising metropolis on Manhatten Island." Another meaning is that the North and West developed much more rapidly than the South and West separated from the sea by mountains so difficult of ascent that less than twenty years ago the first railroad was put across them. Isolated quotations are at best mutilations, but, granting this limitation, the following represent in an interesting way the trend of the work: "New England could not be the key of eastern America in time of war. Her valleys do not run into the heart of the continent." "If, without a mountain barrier, the Atlantic plains had merged into a land like the prairies, it would be hard to say how American history would have shaped itself." "But we wish now to see how the overflow from the East centered upon Pittsburg and passed down the Ohio. . . . . The mountains were like a sieve with openings enough, though small, and everything that went through centered, as in a funnel, in the upper Ohio valleys." Of the Prairie country he says: "But will not the pendulum swing and carry the central states to their natural fellowship with their southern geographical neighbors, giving to geographic conditions their proper control again?" Of California: "Life there is a little fresher, a little richer in its physical aspects, but for this reason more characteristically American." Of Kansas we read: "A people pressed for ready money is a people ready to preach and hold extraordinary doctrines, and thus we are able to see how the Populistic wave of antagonism to eastern financial ideas swept the plain, and how a large political and social movement grew out of the failure of a frontier population to adjust itself properly to geograpnic conditions."

The author's information, and his evident love for the subject, creates an open-eyed interest in the reader; the language is well chosen and the literary style good. As the work of a specialist, the subject-matter is up to date and shows a breadth of outlook that is quite refreshing in a text-book writer. Considerable use is made of geologic data in explaining present configurations and their effects. The breadth of outlook is evidenced, in particular, in the treatment given of the South, of irrigation, and of forestry. The physiographer is written

all over the book. One's impression after a reading is that it is mostly geography. This is true in point of pages, of detail given, and from the fact that most of the history correlated is that of territorial occupation, of migration, and of settlement. In only one chapter does he get into "pure" history: the chapter on the Civil War. The treatment of the taking of Vicksburg, the battles around Chattanooga, and the campaigns in the Shenandoah is fine, if for no other reason than that it illustrates the method by which the organic relationship between geography and "pure" history may be investigated and investigated interestingly. This chapter is of interest for the further reason that here is shown more clearly than elsewhere the art of judicious selection of material. Any work that deals with the relations of two correlates should treat every element of one so that its correlation with an element in the other will be affirmed or denied; yet in many places — *e. g.*, pp. 53-58, 76-86, and in the chapter on "The Prairie Country — a good deal of material is introduced which is not correlated to any term on the other side. There is an attempt made to paint the geographic picture too wide and too continuous for the space at hand.

The judicious selection of good illustrations is pleasingly in contrast to the common extravagant use of illustrations without regard to their appropriateness. All the maps are important for the elucidation of the text though some of them — *e. g.*, the maps of the northern Appalachians and Chattanooga — are too meagerly marked to serve as a reference for all the matter given.

These criticisms aside, the work has the right ring. The spirit is good, the style is popular and withall highly suggestive. For a teacher Professor Brigham's work possesses more than ordinary value, both because of the matter given and because it illustrates how by this method the investigation of the organic relationship of geography to history can be clothed in attractive garb and pushed beyond the stages of relationship more obviously organic into the more specialized forms of each.

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Genetic Psychology for Teachers. By CHARLES HUBBARD JUDD, PH.D. ("International Education Series,") New York: D. Appleton & Co., 1903. Pp. xii, 329.

THIS book has apparently grown out of the author's "experiences of a number of years spent in teaching phychology to classes of teachers." It has the advantage of being in close touch with some of the more pressing and practical problems of elementary-school teaching, as these problems appear from the standpoint of one not directly engaged in the work of such teaching. "Racial and Individual Development in Writing," "The Process of Reading," "The Idea of Number," are chapter headings in the latter part of the book, and represent the application of genetic psychology to the traditional three R's.

What might fairly be called the controlling idea of the book is the idea that genetic psychology properly begins, like charity, at home; that is, with the study of the development of one's own mental processes. Genetic psychology has too often been narrowly conceived as a study of the infant mind, as child-study, as

	FIRST GRADE	SECOND GRADE	THIRD GRADE	
NATURE-STUDY AND SEASONAL OBSERVATIONS.	Observational study of landscape: recording of seasonal changes in a series of paintings; study of temperature, noting its most obvious effect upon trees, flowers, seeds, insects, birds, animals, man.	Observation of landscape continued: recording growth of particular plants and trees in a series of paintings; special attention to plants and animals in Lincoln Park.	Elementary study of climatic conditions in Chicago: keeping of class daily weather record; finding average temperature, rainfall, etc.; special study of water and moisture conditions in the vicinity.	St
GEOGRAPHY.	Frequent excursions to typical areas in vicinity of school: trips to farm; interrelation between farm and city activities.	Excursions to industries and market gardens: South Water Street; groceries; lumber yards; etc.	Excursions to typical city industries and landmarks: study of Lake Michigan and Chicago harbor; water action on lake-shore and in ravines.	St
EXPERIMENTAL SCIENCE.	Simple laboratory experiments in connection with the work in history, geography, cooking, gardening, and with all the forms of hand-work in the grade.	Laboratory experiments in connection with the various occupations of the grade, special experiments with food, wood, and textile materials.	Experimental study of the modern and primitive methods of city illumination, transportation, and water-supply; study of the heating and lighting plants of the school and of homes.	El El
COOKING.	Preservation of garden produce: drying of fruit; popping of corn; canning of pumpkins; baking of apples; making of potato starch; cooking of simple starch foods; making of barley-sugar candy and rock candy for Christmas.	Preparation and serving of simple foods for luncheon: canning of fruit; making of grape juice and jellies; milling and cooking of cereals; making of cocoa; making of pop-corn balls and of hard and cream candies.	Regular preparation of foods for midday luncheon: canning of fruit; preservation of garden products; making of vegetable soup, bread, butter, and cheese; testing of foods for starch and gluten; making of harder candies.	Re
GARDENING.	In the Spring Quarter planting of such vegetables as lettuce, onions, or radishes which will mature before school closes; and of pop-corn, beans, and pumpkins to be harvested in the Fall Quarter.	In the Spring Quarter gardening will take the place of cooking: planting of early spring vegetables and of celery, melons, corn, and wheat. Harvesting in Fall Quarter.	In the Spring Quarter gardening instead of cooking: planting of tomatoes and selected vegetables; of grain and of fall-blooming flowers; special study of soil and water conditions of the garden. Harvesting of garden crop in the fall.	Ga
INDUSTRIAL HISTORY: Study of materials and of modern processes and primitive methods of doing necessary work.	*Subject.*— Study of homes and home activities. *Hand-work.*—Construction of playhouses. Incidental study of materials involved: those used in house, furniture, dishes, bricks, rugs, etc. Outdoor construction of crude shelters adapted to the season: wigwams, igloos. Primitive life in such homes, compared with the child's own life.	*General subject.*—The fundamental world industries, those involving the food, shelter, and clothing of people. *Special phases* of work emphasized in second grade: market gardening; lumbering; cloth-making. *Hand-work.*—Weaving of a crude cloth; making of garden; invention of ways to do work; comparison of own work with that done by modern and by primitive methods.	*Subject.*—The development and growth of typical city industries; industries selected for special study in this grade; city system of illumination, transportation, and water supply. *Hand-work.*—Making of a train of cars for the kindergarten; planning and construction of cars; casting of wheels and track rails; study of motors.	*Sub* *Cor*

FOURTH GRADE	FIFTH GRADE	SIXTH GRADE	SEVENTH GRADE	EIGHTH GRADE
Study of climate of Chicago continued: keeping of weather records; special atention to air and wind conditions; study of type forms of landscape in the United States; use of stereopticon pictures.	More analytical study of landscape: relation of plants and animals to soil and climatic conditions; keeping of individual weather records: comparison of seasonal changes in different parts of North America.	Study of ladscapes and climates of North and South America: readiag of government weather maps, special attention to length of day and night.	Climatic conditions of Eurasia compared with those in America: making of coutour maps; study of typical landscapes in different parts of the world.	Summary of previous work in nature-study: carbon cycle—law of conservation of matter and energy as illustrated by the cycle of carbon from the inorganic state through vegetable and animal life, back into the inorganic state.
Study of mountains, seacoasts, valleys, rivers, flood-plains: topography of Greece; work largely co-related with history.	Shape of earth: study of compass; excursions to areas to study erosion by wind and water; laboratory experiments showing the formation of coastal plains and sunken rivers, etc.	Physiographical types in vicinity: distribution of plants and animals upon selected areas; shore areas swamps, glaciated regions etc.; elementary forestry.	Physiography continued: mapping of areas; field work; special study of Eurasia.	Study of world as whole: continental structure, with laboratory work to illustrate or explain class problems.
Elementary mineralogy: experimental study of the formation and erosion of limestone. Elementary physiology: study of air, water, and foods.	Laboratory experiments in connection with the study of textiles and pottery. Special study of coal and gas.	Elementary physics: evaporation and condensation. Experimental study of fermentation. Examination of structure of plants and animals.	Experiments in plant physiology and field botany: microscopic examination of the cellular stucture of plants. Experiments in mineralogy in connection with the classification of minerals for the school museum. Elementary geology.	Summary and classification of the physics and chemistry experiments of previous grades. Experiments in physics, chemistry, and physiology as demanded in the study of conservation of energy.
Regular preparation of foods for midday luncheon: canning and pickling of tomatoes: making of meat and vegetable soups; of custards, and of gelatine dishes: study of albumen as food principle: making of caramels for Christmas candy.	New England and southern colonial styles of cooking used in preparing for special luncheons and parties: making of jellies for Thanksgiving; making of cornmeal cakes: of brown bread; baked beans and baked Indian pudding, pumpkin pie, and doughnuts.	Preparation of special class luncheons special work in extraction of sugar from sugar beets; study of artificial freezing; making of frozen dishes, ice cream, etc.: special study of sugar crystallization, etc.	Preparation of at least three luncheons during the year as a review of previous work and requiring a simple classification of the foods in making of menus. Special emphasis given to the study of temperature: oven temperatures; effect of heat upon food principles.	Used only as laboratory work in connection with other science work: study of food as form of energy and as fuel; of the food principles and the value of each: noting of the processes and effects of cooking.
Gardening in Spring Quarter: planting of Indian corn: beans, flax, hemp, and cotton to be harvested for the fifth grade work in the following Fall Quarter in the study of colonial industries.	Gardening instead of cooking in the Spring Quarter: planting of a selected grain or vegetable for school use: planting of sugar beets, sorghum, and sugar cane for harvesting the following fall by the sixth grade.	Gardening in the Spring Quarter: planting of selected seeds with reference to fall work in the study of plant structure, seed germination, and plant growth.	Laying out of garden for entire school: use of garden as laboratory in the study of plant physiology; study of effect of heat upon soils.	Planting and harvesting of selected vegetables or grains for the use of the school: garden used to illustrate work in science—one example of carbon cycle.
Subject.—Study of requirements of city continued: Athens as model city; Greek life and work. *Correlated hand-work.*—Making of pottery; making of models of Greek building and of statuary; study of the materials used in modeling.	*Subject.*—Colonial history: Industries of the colonies: type industry selected for study in this grade—textiles. *Hand-work.*—Entire process of preparation of wool and cotton for use: dyeing and weaving: making of vegetable dyes: basket- and bead-weaving.	*Subject.*—Industrial development of the United States: special study of steam engine and various school machinery. *Hand-work.*—experimental work in iron: bridge-making: making of bridge for the kindergarten.	*Subject.*—Arts and crafts movement of the Middle Ages; work of guilds. *Hand-work.*—Bookbinding and printing: entire process of making a book; preparation and tanning of leather for a book cover; binding of magazines of the school for the library.	*Subject.*—American institutions and government; English history. *Hand-work.*—To show outcome of eight years' work: work in wood, metal, textiles, and clay: problems in construction and decorative design.

the analysis of the growth of some other mind. Dr. Judd would have it clearly understood by teachers that their minds, too, have not necessarily ceased to grow, and that there are distinct advantages in watching the unfolding of some mental process at first hand. One of the chief advantages of this introspective genetic psychology is that it affords a basis for studying mental growth wherever found, in the minds of children, as well as in one's own. "Teacher-Study," the special theme of the introductory chapter, is as important for education as "child-study;" in fact it is a prerequisite to "child-study."

The author has ranged far and near for illustrative material to reinforce this idea. Results obtained in the laboratory study of illusions have been turned to account, for example, to show that even such apparently fixed and objective mental experiences as our perceptions of space relationships are susceptible to further development in some instances, which can be studied to some degree at first hand by the nontechnical observer. There is also a chapter devoted to a psychological analysis of the teacher's writing habit — an analysis which can hardly fail to give the teacher of writing a more intelligent and sympathetic appreciation of what probably goes on in the experience of a child learning to write. In the chapter on "Racial and Individual Development in Writing" interesting historical material has been brought together to illustrate the evolution of written symbols. Without directly attacking any system of penmanship or line of copy-books, Dr. Judd has done much both in the psychological and in the historical discussion toward emancipating the teacher from the dogmatism of special methods that tend to sacrifice individuality to a copper-plate uniformity. Individuality in penmanship it is desirable to train, so I understand the argument to run, as well as individuality in other forms of expression. Legibility and fluency are, of course, the main desiderata in this form of expression. But the ways of reaching these ends lie along the paths of individual habits. "Every child should be allowed to sit and hold his pen and paper and move his hand in the way best suited to develop his own individual mode of action" (p. 228). It should hardly be necessary to add that such an opportunity to develop individual mode of action is not a sort of pedagogical *laissez-faire*. "Every child is an individual problem to the teacher." "Individual training means a careful study of individual needs, and a suggestive, helpful guidance on the part of the teacher."

It was the part of good pedagogy for the author to direct his psychological analyses and applications to the subjects in which most of his auditors were principally engaged — the teaching of reading, writing, and arithmetic. It is doubtless well also for those who are teaching in other branches — geography, manual training, natural science, the arts — to be so clearly and forcibly reminded that the three R's have a good deal of educational significance, after all, from the standpoint of genetic psychology. But the book suffers in some respects from its own restrictions of outlook. It seems to see little value in constructive work, in manual training, in laboratory work, save as attempted short-cuts to the present values and meanings of things, superseding the roundabout, but richer and more cultivating, paths of memory and reflection.

"One can avoid memory work through training in the use of things. This is the observation which experience forces upon us at all points, and this is the principle that our modern education is so eagerly taking up in all departments — in the kindergarten, in the constructive work of the elementary schools, in

manual training, and in the laboratory work of our high schools and colleges. Learn by use, learn by doing, and you shall have followed the shortest route to recognition of present, practical meanings." (P. 62.)

One might be willing to entertain such a view as this as an indictment of mechanical, external, unpsychological methods of teaching constructive work, manual training, and laboratory science. But are we to understand that these forms of school work simply represent lines of least resistance, in the Spencerian sense? Spencer would be made to support some of his own arguments for scientific education in a rather curious way. Undoubtedly students could be found who have drifted into such courses out of mental inertia. But students could also be found who have continued in the study of literature, or history, say, because these subjects seemed to afford the lines of least resistance.

The term "memory" is used, as the discussion in the context of the paragraph quoted would indicate, in the sense of reflection, of revision, not in the sense of an almost sheer repetition of a past experience. I have been unable to see that constructive work, manual training, laboratory work in science, do not give rise to difficulties, problems, and projects which call into play the powers of memory, of reflection, at least as often as the three R's give rise to opportunities for fixing mechanical habits of learning by use, by doing. To associate memory, however defined, with any particular form of discipline, or to dissociate it from constructive and experimental activities, is to out-faculty the faculty psychology.

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